CONSTRUCTION NEWS

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RAILWAYS.

(denotes that this work is advertised in Engineering News.)*

ALBERTA & GREAT WATERWAYS.—The Alberta government will award the contract for the construction of this line to FOLEY, WELCH & STEWART, of St. Paul, Minn., and work will be commenced at once. The line will run from Edmonton to Fort McMurray, a distance of approximately 362 miles.

ALBERTA CENTRAL.—This company has applied for permission to build a railway from Saskatoon to Hudsons Bays and will at once start construction on lines provided for in its charter. The main office of the company is now at Red Deer, Alta.

ATCHISON, TOPEKA & SANTA FE R. R.—We are officially advised that new track laid by this company in 1910 is as follows: Texas—The Concho, San Saba & Llano Valley Ry., San Angelo to Sterling City, 42.97 miles; The Pecos & Northern Texas Ry., Lubbock to Coleman, 122.66 miles; Plainview to Floydada, 14.36 miles; Slaton to Lamesa, 54.36 miles; Gulf, Colorado & Santa Fe Ry., Lometa to Colorado River, 1.80 miles; Brady to Melvin, 12.24 miles. California—Arizona & California Ry., Parker to Bengal, 74.14 miles; The Atchison, Topeka & Santa Fe Ry., coast lines, Fullerton to Richfield, 5.10 miles; Fresno County Ry., Kings River Extension, 10.28 miles. It is estimated that 37.34 additional miles will be laid on the Pecos & Northern Texas Ry. and 12 miles on the Gulf, Colorado & Santa Fe Ry. before the end of the year.

BOSTON, REVERE BEACH & LYNN R. R.—A petition has been presented to the Massachusetts Legislature, requesting permission to make the road standard gage, electrify it, and extent it, at the Northern terminus, to connect with the Boston & Maine and, at the Southerly East Boston terminus, to tunnel under the harbor to the Boston South Station. The company, as noted last week, intends to four-track the present line. The Boston & Maine R. R. has a large interest in the Boston, Revere Beach & Lynn, and it is stated on excellent authority that fully 75% of the company's stock is owned by interests friendly to the Boston & Maine. The estimated cost of this construction will be between $15,000,000 and $20,000,000.

CANADIAN PACIFIC.—The Toronto Construction Co. has sublet that portion of its contract on the company's grain route between Cambray and Lorneville to JOHNSON BROS., Lindsay, Ont., and between Cambray and Lindsay to PERRY & STEWART, also of Lindsay, Ont.

CHICAGO, MILWAUKEE & PUGET SOUND R. R.—Newspaper advices are to the effect that a connection will be made to North Yakima, Wash. A line is contemplated up the Columbia River, from Beverly to Kennewick, but whether the North Yakima extension will be built north from Kennewick or south from Ellensburg is a matter of conjecture. E. J. Pearson, Seattle, Wash., is Ch. Engr.

CHICAGO, MILWAUKEE & ST. PAUL R. R.—Newspaper advices are to the effect that this company contemplates the extension of its branch line from Platte, in Charles Mix County, to Chamberlain, Brule County, and from this point north to Orient, Faulk County. The total length of these two lines will be approximately 130 miles and will form a connection between two branches having stub ends, and the main line across South Dakota. D. J. Whittemore, Chicago, Ill., is Ch. Engr.

DELAWARE, LACKAWANNA & WESTERN R. R.—The company contemplates the abolition of the grade crossings at Wyoming Ave. and Myrtle Ave., in Milburn Township. A plan is also on foot to abolish the three grade crossings in the village of South Orange. G. C. Ray, Hoboken, N. J., is Ch. Engr.

EL PASO & SOUTHWESTERN CO.—Press advices are as follows: "Since the Phelps-Dodge interests obtained what amounts to a virtual control of the Rock Island Co. their plans for extending the El Paso & Southwestern R. R., which they also control, to the Pacific Coast have been renewed. It is understood that the latter road will extend its line to Phoenix, Ariz., and eventually will extend it to San Diego, Cal. The Chicago, Rock Island & Pacific connects with the El Paso & Southwestern at Santa Rosa, N. Mex., and upon the fulfillment of the plans of the latter road the Rock Island Co. will have one of the shortest routes from Chicago to the coast, via Kansas City and El Paso, Tex." James Douglas, 99 John St., New York, is Pres.

ERIE R. R.—We are officially advised that the contract for grading work for a second track from Braceville to Windham, Ohio, (6 miles), has been awarded to the FERGUSON-EDMONDSON CO., Brook Valley, Pa. The contract for the grading of the second track from Nankin to Ashland, Ohio (5 miles) has also been awarded to the same firm.

GRAND TRUNK PACIFIC.—The company has given notice of application to build a line from Moosejaw, Sask., to Calgary, Alta.

ILLINOIS, PULLMAN.—Elevation of the railroad tracks in Chicago, at an estimated cost of $7,500,000, was discussed among officials of six railroads and Walter J. Raymer, superintendent of track elevation. Plans and ordinances for the elevation have been completed. The Pullman plan provides for the elevation of 14.19 miles of roadway, covered with 122.16 miles of track. Horace S. Baker, engineer for the department, has been working for months preparing the plans. The Illinois Central R. R. will have to pay about 50% of the total cost.

LEHIGH VALLEY R. R.—We are officially advised that the contract for the double-tracking of a section from Laurel Junction to Silver Brook Junction, Pa. (6.2 miles) has been awarded to WALTER H. GAHAGAN, 189 Montague St., Brooklyn. E. B. Ashby, New York City, is Chief Engineer.

NEW YORK CENTRAL & HUDSON RIVER R. R.—Plans are being prepared by the Engineering Department to materially improve the existing facilities in Utica, N. Y. The team yard will be built to accommodate 171 cars and there will be an inbound freight house, 750 × 50 ft.; outbound freight house, 500 × 30 ft., as well as a new roundhouse. The company is likewise preparing to erect a new station with subway connection to the various tracks, which will cost in the neighborhood of $500,000. The entire improvement is estimated to cost approximately $2,500,000. Geo. W. Kittredge, Grand Central Station, New York, is Ch. Engr.

NEW YORK, NEW HAVEN & HARTFORD R. R.—The contract for double-tracking between Shelton and Halleyville, Conn., has been awarded to C. W. BLAKESLEE & SON, New Haven, Conn.

PACIFIC & PEACE RIVER R. R.—This company is seeking a charter to build a line from Bella Coola, B. C., in a northeasterly direction to Dunvegan in North Alta. J. A. Ritchie, Ottawa, Ont., is solicitor for the applicants.

PEORIA & PEKIN UNION RY. CO.—This company will, in the near future, greatly extend its yard facilities at East Peoria, Ill. The new yards will probably hold 3,000 additional cars and the cost is estimated at about $300,000. W. E. Emery, Peoria, Ill., is Ch. Engr.

SEABOARD AIR LINE RY.—Charles H. Hix, Gen. Mgr. of the road, in an interview in Birmingham recently, announced that the company would within the near future begin work on the extension of its line from Jacksonville, Fla., to Anniston, Ala., a project which has been under consideration for several years. Under the franchise of the company, in Anniston, $25,000 will be forfeited unless the work is begun by Jan. 1.

SOUTH CENTRAL PACIFIC.—James Conmee, Port Arthur, Ont., states that this company will immediately commence construction on a line to run from Vancouver, B. C., to a port on Hudson's Bay, 150 miles to the north of Fort Churchill. The company's charter also provides for a number of branch lines.

SOUTH DAKOTA.—The Missouri River & Northern Ry. Co. has filed its map with the State Railway Commission. This line extends from Chamberlain to Huron. Noted Oct. 6.

SOUTHERN PACIFIC OF MEXICO.—The following from a correspondent has been confirmed at the New York office of the company. The Department of Communications and Public Works of Mexico has just granted the company a concession to construct a line of railway between Guadalajara and Mexico City. The proposed road will be approximately 325 miles long. The line which that company is now constructing down the Pacific slope will connect with the Ameca line of the National Rys. of Mexico at Crendain, 25 miles west of Guadalajara. A few months ago a contract was entered into with the National Rys. of Mexico by which the Southern Pacific might operate its trains into Guadalajara over the 25-mile stretch of road from Crendain. The distance between Mexico City and Guadalajara over the National Rys. of Mexico is 381 miles. It is stated that the proposed line of the Southern Pacific will be shorter than that by at least 50 miles. The construction of this road will give the Southern Pacific a through line between the capital of Mexico and the Pacific Coast region of the United States. The development of this feature indicates that the scheme and policy of the late Mr. E. H. Harriman for the establishment of a great system of railways in that country, to extend from the Pacific to the Atlantic, are to be adhered to.

It is understood that the construction of the Guadalajara-Mexico City line will be started within the next few months. At present the construction forces are concentrated on the line that is being built to Orendain. Since the rainy season ended the forces of laborers have been increased, and it will be made up chiefly of tunnels through the mountains and bridges across the deep Barrancas.

TEXAS.—Pres. W. C. Carwile, of the Pecos Valley Southern Ry., announced that the railway would be extended from Solomon Springs, to which point it is now building from Saragosa, through Balmorhea, to Alpine or Marfa, on the Southern Pacific Ry., thus giving the road a Southern outlet. It was also announced that arrangements had been made to begin the necessary surveys at once. The line will probably follow the one run by Engr. M. L. Swinehart 18 months ago through Fort Davis. The road will cross the Davis Mountains, beginning at a point south of Solomon Spring, near Phantom Lake. The distance between Pecos and Alpine is 96 miles, and about the same to Marfa. Of this 36 miles of road is now built and in operation, while nine miles more is under construction. There will therefore be about 45 miles to 50 miles more of line to be built, in order to make the desired Southern connection at a point on the Sunset Route—Southern Pacific.

ELECTRICAL RAILWAYS.

BRATTLEBORO, VT.—The New York, New Haven & Hartford R. R. Co. is reported to have awarded the contract to the WESTINGHOUSE ELECTRIC & MANUFACTURING CO., for the electrification of the Hoosac Tunnel, under the Hoosac Mountains, in Massachusetts.

BRISTOL, VT.—The construction of an electric line between Bristol and Kingsport, Tenn., is contemplated by the citizens of this place.

BOSTON, MASS.—Construction will probably commence in the spring on an air-line trolley to Providence. This will pass across private land wholly, and will have no grade crossings. Will pass through Hyde Park, Dedham, Canton, Sharon, Mansfield and Attleboro. Stone & Webster, Milk St., are the engineers.

NORTHAMPTON, MASS.—Three miles of tracks will be relaid with 70-lb. rails by the Northampton St. Ry. Co. Louis D. Pellissier, Holyoke, is Secy.

WATERBURY, CONN.—The Connecticut Co. has made application to the Council for a franchise to construct several extensions to its lines in Waterbury. K. E. Kilburn, 134 Grand St., is Chief Engr.

AUBURN, N. Y.—The franchise granted by the city to the Auburn and Syracuse Railroad Company for the extension of tracks in Genesee St. to the city line has been approved by the Public Service Commission. The commission has also approved the franchise granted by the City to the Auburn and Northern Railroad Co. for the re-location of tracks in State St., from State and Seymour Sts. northerly 500 ft., and to re-lay an additional track in the street, with necessary connections.

ALBANY, N. Y.—Construction work on the Harbor Hill trolley line will soon commence. The line will branch off the Clinton Ave. route to Ten Broeck St., go north to Livingston Ave., and as far west on Livingston Ave. as Judson St. Captain Coogan, of the Harbor Hill Improvement Association, is interested.

CORNING, N. Y.—The POWERS & MANSFIELD CO., which has the contract to construct the proposed Elmira-Corning trolley line, has sub-let to JAMES R. STEELE, Owego, for grading two miles of track for the proposed Elmira-Corning trolley line.

NEW YORK, N. Y.—Wm. G. McAdoo, Pres. The Hudson and Manhattan R. R. Co., has submitted a tentative offer to the Public Service Commission to equip and operate the Triborough subway under certain conditions, which may be summarized as follows: The City will build a tunnel under the East River to Lafayette Ave., Brooklyn, and a spur from Broadway and 10th St. to Broadway and 33rd St. (the present terminal of the Hudson and Manhattan R. R.) and omit Canal St. Crosstown Subway. The Hudson and Manhattan R. R. Co. will equip the Triborough system at a cost of $50,000,000. It will also pay the interest on the equipment and construction expenses of the money expended, and will divide the net profits of the operation with the City. A uniform fare of 5 cts. shall be charged on the line of the Triborough subway and the proposed extension, but not on the lines to New Jersey.

PHILLIPSBURG, N. J.—The extension of the trolley line of the Easton & Washington Traction Co., from Port Murray to Hackettstown, has been decided upon. The estimated cost is about $210,000. Z. De Graw, Washington, N. J., is Ch. Engr.

SOUTH AMBOY, N. J.—Application has been made by the Public Service Ry., Newark, to the Council for a franchise to extend some of its tracks to connect with those of the Jersey Central Traction Co. at Broadway and Main St., South Amboy.

REVERE, PA.—The Revere Beach & Lynn R. R. proposes to construct additional lines. Surveys are being made.

UNIONTOWN, PA.—The contract has been awarded to REAGAN-BITTNER CO., for building about three miles of track and grading between Bittner and Leisenring.

JENKINTOWN, PA.—The construction of a trolley line from Hatboro to Bushington is contemplated. It is stated that Messrs. Harris, of Germantown, and Aronson, of Chelten Hills, near Jenkintown, have already caused a survey to be made of the Old York Road to Bushington.

DEMOPOLIS, ALA.—Construction work will commence soon on the line between Demopolis and Linden. Woolsey Finnell, Engr., is interested.

BIRMINGHAM, ALA.—A street railway will be constructed by the Tidewater R. R. Co. The proposed route is as follows: From Underwood Ave., East Lake, to Second Ave., south, Woodlawn; on the Georgia Road and Spring St., Avondale; from this point the line will enter Birmingham directly under the Terminal Station and down Fifth Ave. to Agnes Ave., Graymont; from Ensley over the Jefferson Boulevard, 17th St. and Aves. D and E, Ensley; and from Ensley the line will go through Corey by way of 'Possum Valley Pike, thence on Woodward and into Bessemer on 20th St. In addition to this main line one branch of the Tidewater will go through North Birmingham to Thomas to Pratt City. J. M. Dewberry is Pres.

MONTGOMERY, ALA.—The survey for the new street railway, which the Alabama Traction Co. proposes to operate in this city, was begun a few days ago. The new traction company is capitalized at $1,000,000, of which amount $250,000 has been paid in. In addition to the lines in this city, the company will also operate two interurban lines, one connecting with Prattville, Alabama, a distance of 15 miles, and the other extending to Wetumpka, Ala., a distance of about 20 miles.

MEMPHIS, TENN.—The Louisville & Nashville Ry. and the Southern Railroads, in conjunction with other roads, will construct elevated tracks in Memphis.

HODGENVILLE, KY.—The construction of a line from Corbin to Somerset, thence to Columbia and via Campbellsville and Buffalo into Hodgenville, connecting with the branch of the Illinois Central, is contemplated.

HICKMAN, KY.—The Cape Girardeau, Charleston & Hickman R. R. has received a charter from the Secretary of State to construct a railway from Ancil, in Scott County, to a point opposie Hickman, Ky., in Mississippi County.

FRANKFORT, KY.—Articles of incorporation of the Bowling Green & Northern R. R., capitalized at $30,000, were filed with Secretary of State Bruner to construct a line from Bowling Green to Leitchfield.

CADIZ, OHIO.—The Wheeling, Cadiz & Tuscarawas Traction Co. is reported to have awarded contracts, and stated that construction work will soon commence on its proposed electric railway to connect Bridgeport, Wheeling, Martin's Ferry, Florence, Harrisville, Colerain, New Athens, Cadiz, Franklin, Philadelphia Roads, Dennison, Adena, Uhrichsville and Georgetown. The

Flood Protection in Kansas City.

Definite steps have been taken by the Kaw Valley Drainage District to secure the funds necessary to protect the lower sections of Kansas City from another inundation like that of 1903. After much delay and one unsuccessful attempt, the bonds of the drainage district have been sold. The work, when completed, will cost between $7,000,000 and $10,000,000. The Kaw Valley Drainage District has been definitely defined by the courts as that district which was actually under water in 1903. The floods which have periodically overflowed a portion of this area have cost the cities of Kansas City, Kan., and Kansas City, Mo., anywhere from $20,000,000 to $30,000,000 in damages. It was conservatively estimated in Engineering News, Sept. 17, 1903, that damages in excess of $10,000,000 had been sustained by manufacturing establishments in the two cities that year.

The projected work will include provisions for a channel to carry off approximately 400,000 cu. ft. of water per sec. This will necessitate the building of 10 miles of levee; in some places to the height of 25 ft. The channel, which is now only 450 ft. wide, will be broadened to a minimum width of 734 ft. It will be dredged for a depth of 15 ft. below present low water mark. This dredging will not be any ordinary operation, for in the channel is buried tons of steel from several wrecked railway bridges, several locomotive and numerous car-trucks.

In addition to the work done by the drainage districts the railways must of necessity raise their bridges and the levels of their large yards. The packing establishments and the wholesale district of Kansas City, Mo., will find it expedient to abandon the lower stories of their buildings, as the street levels will be raised from 10 to 20 ft.

distance is 60 miles. Its power plant and repair shops will be located half way between terminals. A. Evans Townsend, Doylestown, is Gen. Mgr.

CINCINNATI, OHIO.—An interurban line from Indianapolis, Ind., to Cincinnati, is being considered by the Indianapolis & Cincinnati Traction Co., it was announced late Monday. The company was organized here Monday. Capital, $3,000,000. J. F. Wild, Indianapolis, is Pres.

HAMMOND, IND.—The Indiana Northwestern Traction Co. is contemplating the construction of a line between Hammond, Ind., from Reynolds and Logansport, Ind., a distance of 151 miles. Surveys for 115 miles have been completed, right-of-way partly secured and seven miles of grading between Chicago Heights and Dyer is ready for laying track. E. Purtell is President and M. Warner is Ch. Engr., 222 La Salle St., Chicago.

PEORIA, ILL.—The construction of an interurban line from East Peoria to Lacon is contemplated. Mr. Black, Galesburg, is interested.

COLUMBUS, WIS.—The Milwaukee Western Electric Ry. Co. has made application for a franchise to build an electric railway. C. A. Chapman, 1537 Marquette Bldg., Chicago, Ill., is Ch. Engr.

DAVENPORT, IOWA.—The Tri-City Ry. Co. has commenced work on the extension of its 27th St. line. F. W. Reimers, Moline, Ill., is Ch. Engr.

ST. PAUL, MINN.—Articles of incorporation have just been filed with the Secretary of State by the Mesaba Electric Co., of Duluth, Minn., for electric railways along the iron range in St. Louis, Itasca and adjoining counties. The capital stock is $50,000, and the incorporators are: Oscar Mitchell, W. D. Bailey and F. M. Emanuelson, all of Duluth.

MEXICO, MO.—The St. Louis, St. Charles & Northern Traction Co. has been chartered to build a railway from St. Charles Pike, Lincoln, Montgomery and Audrain Counties. The distance is 77 miles. The incorporators are: R. E. Race, Mexico; C. Pearson, and R. M. Hendershott, Middletown.

SAN ANTONIO, TEX.—The Terrell Hot Wells Co., of San Antonio, has begun the construction of an interurban railway that will connect this city with the new suburban town of San Jose, five miles distant. It will be operated by gasoline motors.

AUSTIN, TEX.—The Nueces River Valley R. R. will soon let contracts for an extension from Beeville to Eagle Pass, a distance of 180 miles, passing through Simmons City, Tilden and Carrizo Springs. W. A. Frisby, of Beeville, is Pres.

LAS VEGAS, N. MEX.—People of Hope, N. Mex., and this place have already subscribed over $25,000 in cash toward the building of a railway to connect the two cities. The estimated cost will be about $110,000.

PORTLAND, ORE.—From $7,000,000 to $10,000,000 will be spent by the United Rys. in making extensions. John F. Stevens is Chief Executive of the Hill steam and electric railway interests in Oregon.

PRINEVILLE, ORE.—A. H. Young, now of Prineville, has been working with Portland and local people in the interests of a railroad to be built into Prineville. The preliminary surveys are now being made, and the location and final survey will immediately follow. Young, who has charge of the business end of the railroad survey and construction, states that the railroad will be built and the cars running within the next ten months. The estimated cost is $508,000.

OAKLAND, CAL.—The Peninsular R. R. Co. has commenced construction work on the lines to extend on Franklin St. to 20th St., along 20th St., westerly, to Brush St., thence to 18th St., and on down to the bay. Another track will extend on Franklin St. to 22d St. to Broadway, to 21st St. and along the latter thoroughfare until it joins the other track near Market St. J. H. Parson, San Francisco, is Electrical Engr.

VANCOUVER, B. C.—R. H. Sperling, Gen. Mgr. of the British Columbia Electric R. R., states that the company has decided to order new rolling stock to cost approximately $500,000. The company is also planning an extensive construction campaign.

MONTREAL, QUE.—The Montreal St. Ry. will begin the construction of a belt line underground railway as soon as they have secured the necessary legislation.

WATROUS, SASK.—The National Securities Co. are entering into agreement for lighting system and electric car line to Manitou Lake.

LIGHT AND POWER PLANTS.

(Denotes that this work is advertised in Engineering News.)*

PROVIDENCE, R. I.—The Rhode Island Co. has ordered from the GENERAL ELECTRIC CO. the following apparatus: One 15,000-KW. 25-cycle, 11,000-volt, 3-phase Curtis turbine; three 2,000-KW., 600-volt, 25-cycle rotary converters; also three 2,250 three-phase air-blast transformers.

VERGENNES, VT.—Plans have been prepared by the Vergennes Power Co. for the erection of a hydro-electric power plant. The company will also erect a transmission line to Burlington at a cost of $25,000. The proposed plant will supply electricity in Burlington and Vergennes and in all towns and villages along the line. Chauncey W. Brownell is interested.

COLRAIN, MASS.—The management of the Colrain Electric Light Co. has been taken over by the Greenfield Electric Light & Power Co. on Nov. 1. Electricity for the local system will be supplied from Shelburne Falls as soon as the transmission line is completed.

BOSTON, MASS.—Bids will be received for heating and plumbing systems in George T. Angell School by Schoolhouse Comr., until Nov. 28. Charles Logue, Chn.

TIVERTON, CONN.—Application has been made by the Tiverton Electric Light Co. to the Town Council for a franchise to erect electric transmission line on various streets and highways. D. H. Kimball is Supt.

WESTBROOK, CONN.—W. J. Neidlinger is considering the installation of an electric plant to supply electricity for lighting the town.

COHOES, N. Y.—The Hudson River Electric Co. has asked permission of the Public Service Commission of the Second District to execute a contract for the public lighting in the village of South Glen Falls.

NEW YORK, N. Y.—The following bids were received, on Nov. 14, by the Board of Education (1) for the installation of heating and ventilating apparatus: (2) Installing temperature regulation in addition to and alterations in Girls' High School, on the easterly side of Nostrand Ave., between Halsey and Macon Sts., Brooklyn: D. J. Rice, (1) $10,984, (2) $10,581; William J. Olvaney, (1) $11,451; R. J. McKinnon, (1) $11,876 Blake & Williams, (1) $11,880; James Curran Mfg. Co., (1) $11,754; E. Rutzler Co., (1) $10,675; Frank Dobson, Inc., (1) $12,485; Otto Metz, (2) $10,110; Joseph Ryan, (2) $8,675; A. M. Hazeel; C. L. Doolev, (2)$8,847; William Warner, (2) $8,184.

Bids will be received by the Dept. of Health until Dec. 1 for furnishing all the labor and materials necessary or required to install new gas piping and new lighting fixtures in two tuberculosis clinics, one day camp and one department stable in the boroughs of Manhattan and the Bronx. Ernst J. Lederle, Ph.D., is Pres.

NEW YORK, N. Y.—Bids will be received by Calvin Tomkin, Comr. of Docks and Ferries, foot of Battery Place, until noon, Dec. 6, for furnishing all the labor and materials required for the steam heating work in connection with reconstructing and repairing the ferry structures at the foot of Broadway, East River, Borough of Brooklyn.

NEW YORK, N. Y.—Bids will be received until noon, Nov. 30 by the Curator of the College of New York, 139th St. and St. Nicholas Terrace, for the furnishing and delivering of miscellaneous electrical supplies.

HARRISON, N. J.—The construction of a municipal lighting plant is contemplated jointly by East Newark, Harrison and Kearney. Joseph P. Riordan is Mayor of Harrison.

AVONDALE, PA.—Application has been made by the Elk River Light, Heat & Power Co., Newark, Del., for a franchise in Avondale.

PEN ARGYL, PA.—A cable containing 100 wires will be placed on new poles between Pen Argyl and Wind Gap, to replace those recently destroyed by storm. The estimated cost is $10,000.

TOCONY, PA.—The contract has been awarded to the CHARLES McCAUL CO. for the construction of the addition to the boiler house of the power plant of the Frankford, Tocony & Holmsburg Traction Co.

SCRANTON, PA.—Construction work has commenced on the new plant and office building of the Scranton Electric Co., on Pike St. The new building will be 83 × 100 ft., and will be built of concrete and brick. Contractor L. Stepp, 213-214 Peoples Bank, Scranton, has charge of the work.

WILMINGTON, DEL.—The A. S. Reed & Bros. Co. is preparing to build an addition to the experimental station of the du Pont de Nemours Powder Co.

FREDERICK, MD.—The Frederick R. R. Co. will install a 750-HP. engine in the power-house at Middleton. O. B. Coblentz is Ch. Engr.

CRISFIELD, MD.—The Crisfield Light & Power Co. has been organized and will erect a gas and water plant. The main building will be constructed of iron and cement and will contain $40,000 worth of machinery. Charles Owens is Pres., and R. R. Layton, Secy.

NATIONAL SOLDIERS' HOME, VA.—Bids will be received at office of the National Soldiers' Home, Va., until 1.30 p. m., Dec. 12, for labor and material for fixtures for hospital, repairs to quarters of surgeon and quartermaster and installing electric motor, complete, in machine shop. John T. Hume is Treas.

NORFOLK, VA.—Bids for range transmission gear were received by Mason M. Patrick, Col. of Engrs., U. S. A., on Nov. 1, as follows: Union Iron Works, San Francisco, Cal., $7,850; W. L. Bayard & Co., Philadelphia, $4,783; Cyclops Iron Works, San Francisco, Cal., $12,800; Westerman Iron Works, Seattle, Wash., $9,970; Main Street Iron Works, San Francisco, Cal., $5,300; Steacy-(2) $8,675; A. M. Hazeel, C. L. Dooley, Schmidt Mfg. Co., York, Pa., $4,350; The Norbum Eng. Co., Philadelphia, Pa., $5,500; George V. Cresson Co., Philadelphia, Pa., $12,737; Sub-Target Gun Co., Boston, Mass., $15,000; F. Brownell Cook, New York, $5,431.

*RICHMOND, VA.—Bids will be received by W. P. Knowles, Room 109, City Hall, until 4 p. m., Dec. 1, for furnishing, operating, repairing and maintaining 1,200 (more or less) incandescent mantle street lights in the city of Richmond, from January 1, 1911, for a term of one, two or three years, respectively. Specifications may be obtained at the Superintendent's office.

FAYETTEVILLE, N. C.—See item under Water Supply—Irrigation.

CAMDEN, S. C.—The Hermitage Cotton Mills will install a new equipment for electric lighting throughout the plant. About 500 tungsten lamps will be provided. The contract for this equipment has been awarded to the IDEAL ELECTRIC CO., Charlotte, N. C.

ATLANTA, GA.—The Georgia Power Co. is stated to have received permission from the State R. R. Commission to issue $10,000,000 bonds. The company is planning the development of a number of properties on Chattanooga River; also on Tallulah River. C. Elmer Smith, York, Pa., is Pres.

ATLANTA, GA.—Application has been made to the State Railroad Commission for permission to issue $70,000 in capital stock and $100,000 in bonds.

ATHENS, GA.—The installation of an ornamental lighting system in the business district is contemplated. The business men, it is stated, will install the lamps and the Athens Ry. & Electric Co. will supply electricity for operating the system.

ATLANTA, GA.—The Blue Ridge Power Co. has made application to the State R. R. Commission for permission to issue $50,000 in capital stock and $1,375,000 in bonds.

MOULTRIE, GA.—Arrangements for the installation of a 100-KW. generator and a 200-HP. engine, with switchboard, etc., in municipal electric plant is contemplated.

MOULTRIE, GA.—The Municipal Electric Light plant is making arrangements to install a 200-HP. engine and a 100-KW. generator here.

OSYKA, MISS.—Bids were opened by the Mayor and Board of Aldermen, on Nov. 8, for furnishing material and machinery for electric light and water-works. Contracts have been awarded as follows: To the U. S. CAST IRON PIPE CO., Chattanooga, Tenn., for pipe, $4,500; the COLUMBIAN IRON WORKS, for hydrants and valves; the MEMPHIS STEEL CONSTRUCTION CO., for tank and tower; HENRY WORTHINGTON, for pumps; A. M. LOCKETT & CO., for well; WALSH & WEIDNER, for boilers; WALTER CASTENADO, for engine;; FT. WAYNE ELECTRIC WORKS, for electric apparatus; INTERSTATE ELECTRIC CO., for supplies. The work of construction will be done by day labor under the supervision of Xavier A. Kramer, Engr., Magnolia, Miss. Contracts let total about $18,000.

CINCINNATI, OHIO.—It is reported that the Cincinnati Traction Co. will build an addition to its Pendleton power-house in the East End of Cincinnati. The structure will be 40 × 60 ft., of steel and concrete construction. It will be equipped with two additional boilers of 525 HP. each. The estimated cost is about $50,000.

COSHOCTON, OHIO.—The Coshocton Light & Heat Co. has closed a contract with JAMES B. CLOW & SONS to furnish power for the mills just south of the city. At the start, 500 HP. will be furnished, and in a few months this will be increased to 800 HP.

RUSHVILLE, IND.—The contract has been awarded to the HEINE SAFETY BOILER CO., St. Louis, Mo., at $11,068, for installing new boilers in the municipal electric light plant.

INDIANAPOLIS, IND.—It is reported that Beech Grove Construction Co. will construct a substation on 25th St. and Churchman Ave. in Beech Grove. The structure will be 26 × 34 ft. The motor generators will be supplied by FAIRBANKS, MORSE & CO. This company will also obtain power from the Indianapolis Light & Heat Co.

INDIANAPOLIS, IND.—See item under Miscellaneous Contracts: "Building city."

LEESBURG, IND.—The Leesburg Light and Water Co. has incorporated to build, equip and operate a joint light and water plant.

PONTIAC, MICH.—The Pontiac Motor Cycle Co. is constructing a plant for the purpose of manufacturing motor cycles. The company is also erecting three large buildings, one 45 × 208 ft., another 55 × 100 ft., and the third 55 × 128 ft. R. M. Brownson is Pres.

GRAND RAPIDS, MICH.—The Citizens' Telephone Co. contemplates establishing a north end branch exchange at Plainfield and Cort Aves., about Jan 1. The equipment will cost about $8,000 and will provide for about 1,500 lines.

MUSKEGON, MICH.—Vanderwest and Peas, Montgomery Bldg., Muskegon, are receiving bids on a new $75,000 electric light plant for the city of Muskegon. B. H. Tellman is Cy. Cl. City Hall; D. C. Tabor is Engr., Muskegon.

MANISTEE, MICH.—Dan'l J. Albertson, Kalamazoo, Mich., is preparing plans for a Hydro-Electric Development system for the Manistee County Electric Co., c/o Clyde J. Homes, 256 Houseman Bldg., Grand Rapids, Mich. Work will start in early spring. A large steam Auxiliary Plant will probably be located in Manistee.

NEWAGO, MICH.—It is reported that the Newago Portland Cement Co., Michigan Trust Bldg., Grand Rapids, Mich., contemplate the installation of an auxiliary plant of about 1,000 HP. and is considering both a gasoline and gas producer plant.

OLIVET, MICH.—Bids will be received by E. M. Arnos, Olivet, Mgr. of proposed electric light company until N... for the proposed electric light plant. ...ated cost $10,000. Dr. J. C. Shedd, Oliv... Consult. Engr.

JOLIET, ILL.—The contract has been awarded to L. E. MYERS CO. ...ago, for building the hydro-electric sta... at Marseille. The estimated cost is $...

ST. JOSEPH, ILL.—It is ...ed that this city contemplates the con...tion of an electric light plant.

MOSINEE, WIS.—Mark E. ... Neal Brown and C. S. Gilbert are rep... to have organized the Mosinee Electric ... capitalized at $15,000 for the in...tion of an electric light plant.

FORT MADISON, IOWA.—The ...okuk & Hamilton Water Power Co. is ...ng arrangements to commence work ...e construction of a second plant above ...t Madison.

OELWEIN, IA.—R. W. Sau...rs and others, of Chicago, Ill., are sa... to have purchased the plant and holdings ...the Oelwein Light, Heat & Power Co. ...he new owners will construct a new power ...use and install a curb system of lamps.

GRANITE FALLS, MINN.—A ...ro-electric plant will be erected nr. Ye... & Medicine county. The engineers a... Power Engr. Co., Corn Exchange bldg. Minneapolis. The structure will be 1-story, 24 × 36 ft., of brick and concrete.

ST. PAUL, MINN.—Oscar Clau...n, St. Paul, has been selected by Theodore Kane, Chn, of the Common Council, to ascertain the cost of installing lamp heads and posts for gas and gasoline lamps replacing present equipment.

FREMONT, NEB.—The contract has been awarded to RICHARDS KEENE & CO. by Fremont Gas & Electric Light Co. to erect a 1-story cement block building, 30 × 80 ft.

CARRINGTON, N. DAK.—Bids will be received until Dec. 10 by C. W. Burnham, Co. Aud., Carrington, for electric light fixtures for the new County Court House and Jail. Buechner & Orth, 601-2 Manhattan Bldg., St. Paul, Minn., are Archt.

LEXINGTON, MO.—Bids will be received until Dec. 19 at the Supervising Architect's Office, Treasury Dept., Washington, D. C., for the erection of the United States post-office building in Lexington, Mo., including gas piping, plumbing, electric conduits and heating apparatus. Plans and specifications may be obtained at the above office. James Knox Taylor is Superv. Arch.

DENISON, TEX.—Bids will be received by J. D. Yocom, City Secy., until 8 p. m., Dec. 3, for furnishing necessary pumping machinery to equip proposed pumping station at Shawnee reservoir.

*OKLAHOMA CITY, OKLA.—See item under Buildings.

SILVER CITY, N. M.—Messrs. Boulware & Johnson, Silver City, will install a hydro-electric plant of 4,000 HP. on the upper Gila River. The firm's application for the use of 100 second feet of flow of the water of the river to develop the electrical energy has been approved by Vernon L. Sullivan, Territorial Engr. It is stated that the installation of this plant involves the construction of a dam across the river and the laying of a pipe line about 12 miles long. The project will cost about $1,200,000, it is stated, and has been financed in Philadelphia.

TULAROSA, N. M.—An investigation is being made by J. M. Billingsley, Mgr. at the Fred A. Jones Co., Engrs., New Orleans, La., of the ground waters in Tularosa Valley with a view of installing an electric plant.

CUSICK, WASH.—M. A. Phelps & Co. is making preparations for a timber-cutting plant. It will be equipped for electrical operation.

HARMONY, WASH.—Plans and specifications, prepared by the City Electrician, have been adopted by the City Council for the installation of an electric light plant. Estimated cost, from $40,000 to $45,000.

GOLDENOAE, WASH.—E. Witt, is preparing to install an electric light plant on his ranch for the purposes of operating cream separators and other machinery also to illuminate grounds.

CHEHALIS, WASH.—Council has passed a resolution providing for the installation of cluster lights on portions of Stare St., West St., Railroad Ave., Market, Division, National, Front, Cascade Ave., Park St., Chehalis Ave., according to plans and specifications to be approved by the City Councils and the cost of which is estimated at $5,000.

EUGENE, ORE.—The Councils of the cities of Junction and Harrisburg have entered into contracts with the Northwestern Corporations to furnish lighting for these places. M. D. Spencer is Mgr.

PORTLAND, ORE.—The Stark Street Improvement Association has been organized by the property owners of Stark St. for the purpose of installing an ornamental street lighting system from the river to Burnside St., and on Burnside St. to Washington St.

SANTA ANNA, CAL.—Bids for installing a heating plant for City Hall have been received from S. Hill & Son, ...s-Surr Co., of Los Angeles, and F. P. Nic...e Hardware Co. Bids were taken under advisement.

GRIDLEY, CAL.—Preliminary survey is being made for the construction of a tunnel four miles long, running from Big Bar to Bartee Bar on the north fork of the Feather River. The Great Western Power Company

is back of the enterprise and the land through which the tunnel is to be bored belongs to the company. The estimated cost $10,000,000.

LONG BEACH, CAL.—Bids are being asked by the Southern California Edison Co. for the superstructure for the $2,000,000 power plant to be erected by them at Long Beach. R. H. Ballard, Pasadena, is Secy. and Asst. Gen. Mgr.

ALLEGHENY, CAL.—The Middle Yuba Hydro-Electric Co. will light the streets of this place.

WILLOWS, CAL.—An electric company, which is being formed with C. R. Wickes as one of the prime movers and a number of local people as stockholders, has applied to the trustees for a franchise for a line through the streets of Willows, asking that the franchise be offered for sale. The company expects to get power from the Sacramento Valley Power Co., the latter's line now being three miles from Orland.

LONG BEACH, CAL.—THE MACHINERY & ELECTRICAL CO., Los Angeles, has contract for heating and ventilating systems in new Polytechnic High School buildings at $14,584.

NIAGARA FALLS, ONT.—We are officially advised that work has been started on the development of a hydro-electric plant on the Mattagami River, at Sandy Falls, in the Porcupine District, six miles from the Timmins Mine. Three thousand HP. in generators have been ordered from the CANADIAN WESTINGHOUSE CO., and turbines of like capacity from the S. MORGAN SMITH CO., York, Pa. This plant will be in operation by June 1, 1911. Current will be generated at a pressure of 12,000 volts and a frequency of 25 cycles per second. Form of contract for power can be obtained from John B. Holden, Manning Arcade, Toronto, Ont., or from H. D. Symmes, Niagara Falls, Ont.

ROULEAU, SASK.—J. D. Whitmore, Regina, Sask., has been engaged to take charge of the erection of the municipal electric light plant. The estimated cost is about $60,000.

CALGARY, ALTA.—The NORTHWEST GENERAL ELECTRIC CO., Winnipeg, has been awarded the contract for supplying the city with 50,000 lbs. of copper wire at $16.62 per 100 lbs. and 16,000 lbs. of aluminum wire at 22 cts. per lb.

WINNIPEG, MAN.—Bids will be received until 11 a. m. Dec. 15 by Magnus Peterson, Secy. Civic Board of Control, for 500 KW. motor generator sets. Smith, Kerry & Chase, Engrs. Winnipeg and Toronto.

BRANDON, MAN.—A central steam heating plant to supply the business district of the city with heat has been installed by the Brandon Electric Light Co. The system probably will be extended so as to serve the whole city. E. L. Christie is Pres.

MEXICO CITY, MEX.—The Compania Irrigadora de Santa Maria, which was recently organized here, will install a large hydro-electric plant in the Jojutla district, state of Morelos. A waterfall on the Apatlaco River will serve to generate the electrical energy. Power transmission lines will be constructed to industrial centers and plantations of that region. The company will also construct an extensive system upon its own lands, using the electric power to operate the pumps. Emilio Pardo is Pres.; Lieut.-Col. Armado I. Santacruz is Vice-Pres. and Treas., and Indalecio Sanchez Gavito, is Secy.

BRIDGES.

(denotes that this work is advertised in Engineering News.)*

BOSTON, MASS.—An order appropriating $250,000 for a temporary bridge, to last about 15 years, has passed the City Council. Plans for the bridge have been approved by War Department, and provide for a 125-ft. draw span. Louis K. Rourke is Acting Engr.

BOSTON, MASS.—The city is considering the construction of a bridge to Chelsea, at Meridian St., to cost about $125,000. Louis K. Rourke is Acting City Engr.

WORCESTER, MASS.—The Council Commissioners have granted the petition of the City Council to construct a bridge over the Boston & Albany R. R. tracks at Crystal St. Frank A. McClure is City Engr.

TROY, N. Y.—Edward L. Grimes, City Engr., is completing plans for the renewal and repairs of a bridge having two spans 125 ft. and 175 ft., 18-ft. roadway, two sidewalks 6 ft. each, to cost $8,000.

NEW YORK, N. Y.—Bids will be received by Henry S. Thompson, Comr. of Water Supply, Gas and Electricity, until 2 p. m., Nov. 30, for painting bridges in the Westchester County watershed, Boros. Manhattan and The Bronx.

NEW YORK, N. Y.—Bids will be received by Kingsley L. Martin, Comr. of Bridges, until 2 p. m., Dec. 2, for constructing the painting platforms and runways for the Manhattan Bridge over the East River, between the Boroughs of Manhattan and Brooklyn.

NEW YORK, N. Y.—The New York, New Haven & Hartford R. R. Co. will build a $200,000 viaduct bridge across its tracks from Pelham Road over the Bronx River. The new bridge will be 600 ft. long and 70 ft. wide and will form part of 241st St. Edward Gagel, New Haven, Conn., is Ch. Engr. of Bridges.

NEWARK, N. J.—The Board of Chosen Freeholders on Nov. 10 instructed James Owen, County Engr., to prepare plans for the construction of a bridge over the Passaic River at Bridge St.

BRADFORD, PA.—The citizens have voted to issue $27,000 of bonds for the construction of steel bridges across Tuna Creek at Main and Mill Sts., and for repaving Webster St. with vitrified brick. B. A. Wise is City Engr.

SHIPPENSBURG, PA.—Bids are asked by the Borough Council until 8 p. m., Dec. 1, for the erection and construction of a bridge on King St., near Main Run. Paul B. Noftsker is Secy.

PITTSBURG, PA.—The citizens have voted in favor of issuing $1,975,000 of bonds for the construction of the Point bridge and for various bridges across ravines in the city. N. S. Sprague is City Engr.

COURTLAND, VA.—Bids will be received until Nov. 29 at the Clerk's office, Courtland, for constructing nine steel bridges in Southampton County. P. St. J. Wilson is State Highway Comr., Richmond, Va.

NEW MARTINSVILLE, W. VA.—The Baltimore & Ohio R. R. Co. will construct a new bridge across Fishing Creek. J. E. Greiner, Baltimore, is Consult. Bridge Engr.

*BEAUFORT, N. C.—Bids are asked by Capt. Earl I. Brown, Corps. Engrs., U. S. A., Wilmington, N. C., until noon, Dec. 21, for constructing fender piers for highway bridges over Core Creek, near here.

ROCK HILL, S. C.—Bids will be received by W. B. Wilson, County Atty., Rock Hill, until noon, Dec. 1, for furnishing material and the construction of steel bridge across Catawba River at Ivy Mill, between York and Lancaster Counties. The bridge will be 1,200 ft. long. Plans and specifications are on file with the County Attorney and may be had on application. C. F. Gordon is County Superv.

LA GRANGE GA.—Troup County will construct bridges, culverts, etc., in connection with the grading of various roads. W. T. Tuggle is Clk.

BIRMINGHAM, ALA.—The railroad companies entering Birmingham have agreed to turn over to the city $300,000, to be used for the construction of viaducts. This money is ready to be turned over to the City Council, and will be done so just as soon as the Board of Aldermen agree to the proposition submitted by the railroads. The substance of this proposition is that for the consideration of the $300,000 the city will build the viaducts, pay all the damages that may result from such construction, and maintain the viaducts. The proposition of the railroad companies is before the City Council, and definite action will be taken soon. Maury Nicholson is City Engr.

HOLYOKE, MASS.—We are officially advised that the item noted on Nov. 3, that the city has decided to construct two bridges, is erroneous.

CATSKILL, N. Y.—The town has awarded contract to the CATSKILL CONSTRUCTION CO., Catskill, for the construction of a bridge over Vosenkill, where the Susquehanna Turnpike crosses the Kill. The bridge will have a reinforced concrete arch, 15-ft. span and 40-ft. roadway. George Warner, Catskill, is Engr.

YONKERS, N. Y.—The contract for constructing the bridge over Nepperhan River has been awarded to KEARNS & HART, 280 Nepperhan Ave., Yonkers, at $7,648. Noted on Nov. 10.

ALBANY, N. Y.—The contract for the construction of a lift bridge over the Erie Canal at Franklin St., Syracuse, has been awarded to the STEEL STORAGE & ELEVATOR CONSTRUCTION CO., 720 Main St., Buffalo, N. Y., at $38,246. Bids were opened on Nov. 10 by F. C. Stevens, Supt. Pub. Wks. List of bidders noted on Nov. 17.

WEST BRANCH (Oxford post-office), PA.—Contract for removing the old bridge across the Chester River between West Branch and Crozerville and replacing it with a wooden concrete, stone and iron structure has been awarded by the County Commissioners to CHARLES J. PRATT, Lima. Contract for concrete work has been sublet to JOSEPH ROBB, Cheyney.

SCRANTON, PA.—Contract for the construction of the Mulberry St. viaduct will be awarded during the winter.

ALLENTOWN, PA.—The County Commissioners, on Nov. 14, received the following bids for widening the Hamilton St. bridge: George H. Hardner, $26,250; C. P. & C. D. Stewart Construction Co., $19,750; Penn Bridge Co., $26,000; Schaffer & Ackerman, $32,300.

SLATINGTON, PA.—The County Commissioners on Nov. 4 awarded the contract for constructing the wing walls for the Slatington bridge to THOMAS W. HAINES, Wilkes-Barre, at $4,700. The only other bidder was William Barrall, at $5,187.

PETERSBURG, VA.—The Walnut Hill Corporation will construct a viaduct across valley of Lieutenant Run, of steel and concrete, about 600 ft. long. Estimated cost, between $40,000 and $50,000. The VIRGINIA BRIDGE & IRON CO., Roanoke, Va., has the contract for the structural steel.

WHEELING, W. VA.—The Board of Control has awarded the contract for placing a concrete floor, renewing a number of girders and incasing all steel work for a foot above and a foot below the floor of the 17th St. bridge to the INDEPENDENT IRON & STEEL CO., Pittsburg, at $8,735. The only other bidder was the Portland Concrete Co., at $9,000. C. C. Cooke is City Engr.

SHREVEPORT, LA.—Bids are asked by the Police Jury of Caddo Parish, Shreveport, until Dec. 8, for either steel or wooden bent bridge in Ward 1, across Horseshoe Bayou, one-half mile north of Belcher, approximately 100 ft. long; also bids for either steel or wood for following bent bridges in Ward 1: Bridge at Sellington's place 20 ft. long; one across Dooley Bayou 40 ft.; one north of Cavett's store 20 ft.; one below Cavett's 20 ft., and one at Swan's place 20 ft. If bids of wood are accepted bridges to be built according to parish specifications. A. L. Duringer is Clk.

CINCINNATI, OHIO.—The Council has authorized the preparation of plans for the construction of a bridge at Elder St. Plans for the construction of a viaduct at Hopple St. have been completed.

CLEVELAND, OHIO.—The citizens have voted $2,000,000 of bonds for the construction of a high-level bridge from Superior Ave. to Detroit Ave. Robert Hoffman is City Engr.

JEFFERSON, OHIO.—Bids will be received by the Board of Commissioners of Ashtabula County, until 1 p. m., Dec. 19, for the construction of a riveted steel Pratt truss bridge. Plans may be seen at the office of the County Engineer.

CELINA, OHIO.—The Board of County Commissioners has awarded the contract to WILLIAM WARD, Celina, for a steel and concrete, 125-ft. single-span bridge, to be constructed over the Wabash River. Estimated cost, $5,000. Bids for the steel work will be received until Dec. 1. L. Marsh is County Engr., Celina.

YOUNGSTOWN, OHIO.—The County Commissioners have awarded the contract for the construction of a bridge on Power Road to J. BLIM & SON, at 75 cts. per cu. yd. for excavation and $6.35 per cu. yd. for masonry. The contract for a bridge over Dry Run has been let to L. K. MAUSER, North Walnut St., Youngstown, at 30 cts. per cu. yd. for excavation, and $5.50 per cu. yd. for masonry.

The County Commissioners have awarded the general contract to L. K. MAUSER, Youngstown, Ohio, for the construction of an 80-ft. span bridge, concrete or steel, at East End Park.

CLEVELAND, OHIO.—The city is planning to convert Central viaduct into a high-level bridge. Estimated cost, $450,000. Robert Hoffman is City Engr.

EDWARDSPORT, IND.—Bids are asked by the County Commissioners, Vincennes, Ind., until Jan. 5, for the construction of a bridge across the White River, connecting Knox and Daviess Counties.

INDIANAPOLIS, IND.—The contract for the construction of two bridges across Pogue's River has been awarded to the HACKEDORN CONSTRUCTION CO., Indianapolis, at $9,000 and $9,300, respectively.

INDIANAPOLIS, IND.—Bids will be received by the Board of Commissioners of Marion County, until 10 a. m., Nov. 25, for the construction of a bridge over Crooked Creek. Albert Sahm is County Audr.

BRISTOL, IND.—The contract for the construction of a bridge over the St. Joseph River, at Bristol, has been let to the ELKHART IRON & BRIDGE CO., Elkhart, Ind., at $15,500. The bridge will be a steel structure, with concrete floor. It will be 257 ft. long and 30 ft. wide, with 5-ft. sidewalks on each side. The bridge will have four spans and will be 23 ft. above water.

KALAMAZOO, MICH.—The citizens have voted to issue $25,000 of bonds for the construction of bridges. C. L. Miller is City Clk.

AURORA, ILL.—H. S. Wetherell, Chicago, has been engaged to prepare plans for the construction of a concrete bridge over the river between Illinois Ave. and Pierce St. Estimated cost, about $35,000.

MONEE, ILL.—Bids will be received by William Cellarius, Town Clk., until 1 p. m., Nov. 30, for the construction of two reinforced concrete bridges to be erected by Monee and the town of Crete. Plans may be seen at the Town Clerk's office, or may be obtained upon application, in writing, from the Illinois Highway Commission, Springfield.

GARDNER, ILL.—Contract has been awarded to WILLIAM H. SHONS, Freeport, Ill., for the construction of a bridge here, at $6,000.

ROCK ISLAND, ILL.—The city will receive bids until Dec. 5, for the construction of a steel and reinforced concrete bridge, 158-ft. span, 16-ft. roadway, creosoted block deck and concrete floor and piers, over Rock River, near Rock Island. Wallace Treichler is City Engr.

WYANET, ILL.—The Commissioners of Wyanet have awarded the contract for a 110-ft. steel and concrete bridge to H. S. WEATHERELL, Wyanet. Estimated cost, $6,000. A. M. Johnson, Springfield, Ill., is Engr.

FOX LAKE, ILL.—The citizens of Fox Lake and property owners of McHenry County are considering the construction of a concrete bridge across the north end of Pistakee Lake, south of the St. Paul Bridge, for the use of teams and pedestrians. Estimated cost, $60,000.

OREGON, ILL.—A contract has been awarded to BERT ABBOTT, Oregon, Ill., for rebuilding the floor of the Oregon bridge, over Rock River, at $6,500. The contract calls for 2-in. pine floor, coated with pitch, upon which is to be laid creosoted white oak blocks, thoroughly saturated with pitch and sanded.

JANESVILLE, WIS.—The citizens have voted to construct cement and steel bridges at Fourth Ave. and Racine St. Estimated cost, $25,000 and $17,000, respectively. C. V. Kerch is City Engr.

LONE TREE, IOWA.—The contract has been awarded to the IOWA BRIDGE CO., Des Moines, Iowa, for the construction of a steel bridge over the Iowa River, near here. Estimated cost, $8,000.

GRUNDY CENTER, IOWA.—We are officially advised that the time for receiving bids for material for bridges has been postponed. Bids were to have been opened on Nov. 16. E. G. Enswinger is County Audr. Noted on Nov. 10.

ST. PAUL, MINN.—L. W. Rundlett, City Engr., is completing plans for the construction of a concrete bridge, 1,100 ft. long, at Earl and Seventh Sts. Estimated cost, $20,000.

TOPEKA, KAN.—The City Commissioners, on Nov. 2, awarded the contract for the extension of the Kansas Ave. bridge over the Kansas River to the WILLIAM P. CARMICHAEL CO., 516 Midland Bldg., Kansas City, Mo., at $28,800. The extension consists of two Melan type reinforced concrete arches, each of 75-ft. clear span.

GRAND FORKS, N. DAK.—The City Council is considering plans for the reconstruction of the Minnesota approach to the De Mers Ave. bridge.

ST. LOUIS, MO.—The Board of Public Improvements has received detail plans for the construction of a concrete and steel viaduct over the railroad tracks at Compton Ave. Estimated cost, about $370,000. Noted on Oct. 20. Maxime Reber is City Engr.

RICHMOND, TEX.—Fort Bend County has voted $30,000 of bonds for the construction of a bridge across the Brazos River, at Thompson, and $30,000 for a bridge at Orchard.

FARWELL, TEX.—The Rock Island, Texico, Farwell & Southern Ry. Co., James Hicks, Ch. Engr., Texico, N. Mex., will construct several wooden trestles in connection with the railroad from Farwell to Pecos, Tex. Address M. F. Calback, Texico.

PUEBLO, COLO.—Bids were received as follows on Nov. 7 by the City Council for the construction of the proposed new steel bridge over the Arkansas River at Union Ave.: Midland Bridge Co., Kansas City, Mo., $50,600; Missouri Valley Bridge Co., Wichita, Kan., $50,800; J. J. Burke & Co., $52,000; PUEBLO BRIDGE CO., Pueblo, $49,000 (awarded contract); M. J. Patterson Construction Co., Denver, Colo., $59,000; A. M. Blodgett Construction Co., Kansas City, $49,950. D. P. Gaymon is City Engr.

SPOKANE, WASH.—Plans for the construction of the concrete bridge across Latah Creek at Sixth Ave., are completed. Two designs have been drawn, to cost $450,000 and $425,000, respectively. Both provide for a 45-ft. roadway, two 7-ft. sidewalks and are designed to accommodate double car tracks.

Plans have been approved by J. C. Ralston, City Engr., for the construction by the Chicago, Milwaukee & St. Paul Ry. Co., of a concrete bridge on West Olive St.

SPOKANE, WASH.—The City Council has approved plans for the construction of the 6-arch concrete bridge over Hangman Creek, to cost $425,000. Plans have also been approved for a large steel viaduct to carry Walnut St. over the Great Northern Ry. tracks and switch tracks of the Oregon R. R. & Navigation Co. in the North Side. Morton MacCartney is City Engr.

ABERDEEN, WASH.—Bids will be received by the City Council until 7.30 p. m., Dec. 7, for building a wooden span bridge at North Aberdeen, across the Wishkah River. P. Clark is City Clk.

SAN DIEGO, CAL.—The Board of Supervisors has received bids as follows for a concrete bridge across Santa Marguerita River: Charles Steffgen, Los Angeles, $6,260; Young Construction Co., $16,280.

SAN JOSE, CAL.—The Board of Supervisors will receive bids until 11 a. m., Nov. 26, for the construction of a reinforced-concrete bridge over Los Gatos Creek on Lincoln Ave. The bridge will be a single span of 44 ft. with a 25-ft. roadway. J. G. McMillan is County Surv.

SAN DIEGO, CAL.—Bids will be received by the Board of County Supervisors, until Dec. 6, for the construction of five bridges on the road between Oceanside and the Orange County line. Plans and specifications in the office of the County Highway Commission provide for wooden pile approach, wood and steel bodies and cylinders, piers of steel and concrete. Estimated cost, $27,000.

LOS ANGELES, CAL.—The Council on Nov. 1 approved the plan to construct a 6-span ornamental concrete bridge across Arroyo Seco at Pasadena Ave. Estimated cost, about $144,000. It will be constructed jointly by the County Supervisors, South Pasadena, Salt Lake Ry. Co., and this city.

MODESTO, CAL.—The contract has been awarded to the PACIFIC CONSTRUCTION CO., 16 California St., San Francisco, by the Board of Supervisors for the construction of concrete bridges across Ingram Creek and El Puerto Creek in District No. 5, at $7,183 and 30 cts. per cu. yd. for earth fill.

PASADENA, CAL.—Long & Carey, 16 South Raymond Ave., will receive bids for the construction of a reinforced concrete bridge to span the Arroyo Seco at Arroyo Park. The bridge will be 350 ft. long, 30 ft. wide and 50 ft. high. Estimated cost, $20,000.

COEUR D'ALENE, IDAHO.—Carscallen Bros. have submitted the lowest bid for the construction of the proposed steel bridge across the Coeur d'Alene River here at $7,150.

OWEN SOUND, ONT.—The Town Engineer has been authorized to prepare plans and submit estimates for the construction of a new bridge to replace the Tenth St. bridge.

WINNIPEG, MAN.—WILLIAM NEWMAN & CO. have been awarded the contract for the construction of new bridge on the Pheasant Hills branch of the Canadian Pacific Ry.

BUILDINGS.

*(*Denotes that this work is advertised in Engineering News.)*

BOSTON, MASS.—We are officially advised that the contract to construct the Bigelow Kennard building here, has been awarded to the WHITNEY-STEEN CO., 1 Liberty St., New York. Henry Ives Cobb is the Arch. Cost, $400,000.

Bids will be received by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., until 3 p. m., Dec. 22, for the construction (including the drainage system, etc.), of the Appraisers' Stores at Boston.

NORTHAMPTON, MASS.—Plans have been completed by A. Lincoln Fechheimer, Arch., Andrew's Bldg., Cincinnati, Ohio, for the proposed administration building to be erected here for the Clark School for the Deaf. It will be a 2-story brick building and will cost about $50,000.

BOSTON, MASS.—The contract to erect a boiler-house for the Prescott School has been awarded to D. F. BURKE, 7 Alden St., Boston, at $23,500.

SPRINGFIELD, MASS.—Plans have been prepared by Joseph M. Vana, Arch., 24 North St., Pittsfield, for the proposed Morningside

Baptist Church. It will be erected at the corner of Grove and Tyler Sts., Springfield, and will be of brick construction. Cost, $40,000.

SPRINGFIELD, MASS.—E. C. & G. C. Gardner, Archs., 33 Lyman St., have prepared plans for the isolation hospital to be erected for the City Hospital. It will consist of a 3-story administration building, laundry building and a ward building, to accommodate 100 patients. The structure will be of brick, fireproof construction, with iron stairs and tile flooring. Cost, $175,000.

SOUTH HADLEY, MASS.—Plans have been completed by Walter F. Price, Arch., 714 Walnut St., Philadelphia, Pa., for the proposed alumnae building for the Mount Holyoke College. Mrs. M. D. Wilcox, of Lawrenceville, N. J., is Chn. of the Building Com. Estimated cost, $80,000.

HARTFORD, CONN.—Plans are being prepared for the proposed 10-story building, 48 × 127 ft., to be erected by the Southern New England Telephone Co. It will be of brick and steel, fireproof construction, with Stony Creek granite trim, slag roof, steam heat, gas and electric lights, two elevators, tile work, wire work, etc. L. W. Robinson, Exchange Bldg., New Haven, is the Arch.

NEW YORK, N. Y.—Bids will be received until 2.30 p. m., Nov. 30, by Michael J. Drummond, Comr., Dept. of Public Charities, for furnishing all the labor and materials required for the erection and entire completion of a new dormitory for female help at the Metropolitan Hospital, Blackwell's Island, the City of New York.

NEW YORK, N. Y.—Plans are being drawn for the construction of a theatre building to be built by the Hudson Realty Co., 115 Broadway, at the southeast corner of Courtlandt Ave. and 149th St. The proposed structure is planned to be a 5-story combination theater and office building, covering a plot 100 × 141 ft., the plans being similar to the Alhambra, at Seventh Ave. and 126th St.

John Deinhardt, 766 Decatur St., Brooklyn, plans the erection of eight 2-story brick houses, 19 × 55 ft. each, at Union Course, on the east side of Lott Ave., and the west side of Windham St. The cost, with plumbing, will be about $45,000.

Plans have been filed for an 8-story brick store and loft building to be erected at 634 Fifth Ave. for the estate of T. R. A. Hall, on land owned by the trustees of Columbia University. The building will be fireproof, with a facade of brick, Indiana limestone and terra cotta with a frontage of 50 ft. and a depth of 121 ft. George Provot, 104 West 42d St., the Arch., estimates the cost at $75,000.

Plans have been filed for a 6-story brick loft on the south side of 32d St., 100 ft. west of Sixth Ave., for L. & A. Pincus at a cost of $50,000. The building will have a frontage of 41.8 ft. and a depth of 88.9 ft., with a facade of brick, ashlar and galvanized iron. B. W. Levitan, 20 West 31st St., is the Arch.

Goldner & Goldberg, Archs., 704 Jackson Ave., have plans in progress for a 6-story loft building, 34 × 60 × 75 ft., to be constructed at 760-762 Greenwich St. through to 110 Bank St., for the Froma Realty Co., of which George Brown, 161st St. and Robbins Ave., is Pres.

NEW YORK, N. Y.—Plans have been prepared by Henry Nordheim, Arch., 1087 Tremont Ave., for two 5-story brick stores and tenements, 76 × 60.10 ft. Joseph Diamond, 1139 Wyatt Ave., is the owner. The total cost will be $125,000.

Gatlan Ajello, Arch., 1 West 34th St., is preparing sketches for Paterno Bros., Claremont Ave. and 116th St., who will erect a 12-story apartment house, 75 × 100 ft., at the southwest corner of Broadway and 115th St., to cost in the neighborhood of $650,000. F. A. BURDETT & CO., 29 West 34th St., have been appointel steel engineers. These will accommodate 48 families. The owners will handle the building contracts.

Moore & Landseidel, Archs., 148th St and Third Ave., are preparing plans for six 4-story brick tenements, with plastic slate roofs, 37.6 × 67 ft., on the east side of Seabury Pl., 50 ft. east of 172d St. The owners are Barry Bros., 2804 Third Ave. Estimated cost, $150,000.

Plans have been prepared by Samuel Sass, Arch., 32 Union Sq., for two 5-story brick tenements; one on the northeast corner of Webster Ave. and 182d St., and the other at the northwest corner of Park Ave. and 182d St., 50.1 × 82.8 ft. and 50.3 × 80.10 ft., respectively. The Jaybee Improvement Co., Joseph Bernstein, Pres., 621 East 135th St., is the owner. Estimated cost, $50,000 each.

NEW YORK, N. Y.—Shampan & Shampan, Archs., 772 Broadway, Brooklyn, are preparing plans for two 4-story apartment houses to be erected on the block front, south side of Third Ave., Brooklyn, including the corners of 89th and 90th Sts., 78.7 ft. on Third Ave., 99.5 ft. in 89th St. and irregular in 90th St. The approximate cost will be $100,000. Harris Wilner, 1260 49th St., Brooklyn, is the owner, and expects to immediately start the operation.

Kurzman Bros., millinery importers, 385 Fifth Ave., have leased the property at Fifth Ave. and 36th St., and plan to erect a building on the lot, 49.9 × 125 ft. Plans will be prepared as soon as arrangements can be made.

NEW YORK, N. Y.—The following bids were received on Nov. 14 by C. B. J. Snyder, Supt. Bldgs., Dept. of Education, for the general construction, etc., of P. S. No. 168 on the westerly side of Throop Ave., between Bartlett and Whipple Sts., Boro. of Brooklyn: Thomas McKeown, Inc., $263,700; Thomas J. Buckley Construction Co., $301,889; John Kennedy & Co., $283,940; Betsford-Dickinson Co., $244,127; William J. Moran, Inc., $289,726; P. J. Brennan & Sons, 624 Madison Ave., $266,900; Keenan & Corrigan, $261,435; H. C. Stowe Construction Co., $264,300; Kerr & Krinkle, $273,000; R. E. Henningham, 1 Madison Ave., $268,835; Peter Cleary, $269,690; F. T. Nesbit & Co., 116 Nassau St., $293,000; John Auer & Sons, $266,290; T. A. Clark Co., $257,300; Concord Construction Co., $295,227; George F. Driscoll, 584 Union St., Brooklyn, $277,498.

NEW YORK, N. Y.—Herts & Tallant, Archs., 113 East 19th St., have prepared plans for the general overhauling of the Hackett Theatre on 42d St., near Broadway. The heating, lighting and ventilating systems will also be rearranged. The cost of the proposed improvements will be about $50,000.

Plans for a 27-story office building to be erected at the corner of Broadway and Park Pl. by the Broadway-Park Place Co., have been filed. The cost of the foundations alone will be $500,000. The superstructure will be constructed of brick and stone and will have a frontage of 105 ft. and a depth of 75 ft. with an extension, 86 × 86 ft. and 15 stories high. The height of the main building will be 625 ft. The front will be of stone and terra cotta. F. W. Woolworth is Pres.

Bids are now being received by J. C. Watson, Arch., 217 West 125th St., for the construction of an elevator apartment house on Amsterdam Ave., near 176th St. It will be constructed of brick, iron and stone, and will be six stories high with stores, 100 × 200 ft. The Gingold Realty Co., 101 West 42d St., is the owner. Cost, $300,000.

BUFFALO, N. Y.—The Church of Christ, Independent Scientist, A. B. Brown, 425 Richmond Ave., will erect a church at West Ferry St. and Norwood Ave. It will be of brick and stone. Cost, $50,000.

BUFFALO, N. Y.—The Roman Catholic Diocese of Buffalo, Rt. Rev. Charles H. Colton, Bishop, 1025 Delaware Ave., has accepted the designs of Aristides Leonori, Arch., of Rome, Italy, for a cathedral, 150 × 250 ft., of cruciform plan, 100 ft. high with twin towers 250 ft. high. It will be erected at Delaware Ave. and West Utica St., at a cost of $500,000. White marble will be used throughout and the architecture will be pure Gothic in type. Fletcher H. Burke, Arch., of Buffalo, will represent Mr. Leonori as his associate, and will have personal supervision of construction.

BUFFALO, N. Y.—G. Morton Wolfe, Arch., Ellicott Square Bldg., has completed plans for store and office building, 100 × 100 ft., two stories and basement, of brick and steel, to be erected on Main St., near East Ferry St., for John O'Brien, 55 Cleveland Ave.

St. Lukes German Evangelical Church has awarded the general and carpentry contracts for a stone church, 56 × 110 ft., at the corner of Richmond Ave. and West Utica St., to WILLIAM STOKES & SONS, Brisbane Bldg. Rev. W. F. Werheim, 335 Richmond Ave., is Pastor. Cost, $60,000.

Esenwein & Johnson, Archs., 777 Ellicott Sq., have completed plans for building four additional stories of brick and steel construction on the Iroquois Hotel Annex, fronting on Washington St., making the annex 10 stories in height and adding 125 rooms. The estimated cost is $150,000. Woolley & Garrans are the owners.

ELMIRA, N. Y.—The contract to erect the proposed Carnegie science hall for Elmira College on the college campus, has been awarded to the PULFORD & DEMPSEY CONSTRUCTION CO., of Elmira. It will be four stories high, 50 × 100 ft., and will cost about $40,000.

SCHENECTADY, N. Y.—George B. Post & Sons, 341 Fifth Ave., New York, have been commissioned by Charles A. Richmond, Pres. of the Union University, to prepare plans for a gymnasium. The estimated cost is $120,000.

SYRACUSE, N. Y.—M. C. Conway, Arch., Bastable Bldg., has plans in preparation for a church building, two stories and basement, of brick and stone, to be erected at Vine and Dillaye Sts., by the East End Polish Church Society. Rev. Francis Rusin is Pastor, West Genesee and Lakeview Aves. Estimated cost, $45,000.

ROCHESTER, N. Y.—The Second Baptist Church, Rev. C. H. Rust, Pastor, 201 Barrington St., contemplates the erection of a church, of stone and structural steel, 150 × 200 ft., on a site secured on East Ave. at Swan St. Estimated cost, $150,000.

ROCHESTER, N. Y.—J. Foster Warner, Arch., Granite Bldg., is preparing plans for P. S. No. 20, to be erected by the city, on Oakman St. It will be of brick and stone, two stories and basement. Estimated cost, $150,000.

YONKERS, N. Y.—The Building Inspector of Yonkers has granted permits to the ATLAS CONSTRUCTION CO., 116 Nassau St., New York, for 17 2-family brick houses on Tibbets Road, east of the Putnam R. R. and north of McLean Ave., Yonkers. Each will be two and a half stories high, 22 × 65 ft.

JERSEY CITY, N. J.—Plans have been completed by John T. Rowland, Jr., and Frank Eurich, Jr., Archs., 15 Exchange Pl., Jersey City, for the erection of a 3-story office building. It will be built at the corner of Greene and Montgomery Sts. for the Jersey City Journal, 37 Montgomery St. The architects are now receiving estimates on the general contract. Noted on Oct. 6.

NEWARK, N. J.—The Newark Technical School, 367 High St., has awarded to SALMOND BROS. CO., of Arlington, N. J., the general contract to erect a 3-story brick and limestone school, at Summit St. and Summit Pl., to cost $70,000. Frederick Phelps, Union Bldg., is Arch. and Engr.

NUTLEY, N. J.—R. King Conklin, Arch., 45 Clinton St., Newark, has been selected to prepare plans for the 2-story reinforced-concrete school, 75 × 100 ft., to be erected at Washington Ave., Avondale Road and Walnut St. The cost will be about $50,000.

WEEHAWKEN, N. J.—We are officially advised that the contract to build a 5-story apartment house at the corner of Second St. and East Boulevard has been awarded to CHARLES H. RANDALL, of Weehawken. It will be built of hollow tile, and will be 65 × 49 ft. The owner is Albert P. Bauman, care of contractor. Cost, $40,000.

EAST RUTHERFORD (Rutherford post-office), N. J.—We are officially advised that the general contract to construct a school building here for the Board of Education was awarded to WARREN B. EYRICH, of Grantwood, on Nov. 16. Ernest Sibley, of Palisade, is the Arch. Cost, $70,000.

*CHAMBERSBURG, PA.—The following bids were received by James Knox Taylor, Superv. Arch., Treasury Department, Washington, D. C., on Nov. 16, for the construction of the U. S. post-office at Chambersburg: King Lumber Co., Charlottesville, Va., $65,900; R. S. Moore, Lafayette, Ind., $79,000; W. H. Fissell & Co., St. James Bldg., New York, $68,700; A. B. Stannard, St. James Bldg., New York, $65,700; M. P. Wells, Witherspoon Bldg., Philadelphia, Pa., $64,777; W. A. Pentz, Scotland, Pa., $74,455; J. E. & A. L. Pennock, Land Title Bldg., Philadelphia, Pa., $67,870.

ERIE, PA.—The contract to build a 4-story addition to St. Vincent's Hospital has been awarded to CONSTABLE BROS., of Erie. It will be constructed of brick and iron and will be 40 × 60 × 108 ft. Estimated cost, $82,000.

HAVERFORD, PA.—Bids will be received soon by Bailey & Bassett, Archs., 421 Chestnut St., Philadelphia, for the erection of a 4-story apartment house for Frank H. Mahan. It will be of brick, marble and stone and 160 × 45 ft., with two wings, 30 × 40 ft. and 30 × 60 ft.

PHILADELPHIA, PA.—W. C. Benkert, Real Estate Trust Bldg., representing the Douredoure Estate, has leased for ten years to the Locomobile Co. of America, 245 North Broad St., the property at 2314-2322 Market St., where a $100,000 concrete garage, five stories high, 78.6 × 105.10 ft., will be erected.

The University of Pennsylvania is preparing to increase its dormitory space by the addition of a new section to cost approximately $75,000. This building will be of the same style and appearance as the other recently constructed dormitory buildings, and will occupy a position adjoining the Graduate House and facing the grounds of the University Hospital toward the east and the big quadrangle toward the west. Charles C. Harrison, LL.D., is Pres.

Plans have been prepared by A. A. Ritcher, Arch., of Lebanon, for a church at Frankford Ave. and Foulkrod St., for the Frankford Ave. Methodist Episcopal Church. Rev. W. E. P. Haas, 1618 Foulkrod St., is Pastor. It will be of stone and terra cotta, one story high, 60 × 90 ft. Cost, $50,000.

PHILADELPHIA, PA.—Plans have been prepared by Edgar V. Seeler, Arch., Real Estate Trust Bldg., for a 7-story office building for the Fire Association of Philadelphia, 417 Walnut St. It will be of brick, steel and concrete, and will be erected at Fourth and Walnut Sts. Bids will be received soon.

The Directors of the Manufacturers' Club, Broad and Walnut Sts., plan to erect a new clubhouse on the site of the present building. The plans call for an 8-story structure of stone and marble. The cost will be in the neighborhood of $1,000,000. The club will establish temporary headquarters on the second floor of the Bellevue-Stratford. Address the Secretary.

A permit was obtained by METZGER & WELLS, builders, Heed Bldg., recently for the erection of a 5-story club building at 3529 Locust St. for the Beta Theta Pi Fraternity.

PITTSBURG, PA.—We are officially advised that the contract to erect the proposed Y. M. C. A. building will be awarded soon. It will be a 3-story fireproof structure of brick and terra cotta, 85 × 115 ft. R. Maurice Trimble, Ferguson Block, is the Arch. The building is estimated to cost $85,000 and the equipment $15,000.

The Goettman Co. has leased the property at 324-330 Diamond St., and plans to construct a 2-story building, to replace the one destroyed by fire last summer. John and George Goettman are the officers. Cost, $50,000.

VERONA, PA.—The Best Improvement Co. has purchased property in Verona, and plans to build about 100 brick houses, for its employees. George Best is Pres. The company's plant is in Oakmont. Estimated cost, $500,000.

SCRANTON, PA.—Plans have been completed by John Howley, Arch., for the proposed home for the Catholic Women's Club, at Mulberry St and Wyoming Ave. The cost is estimated at $85,000.

ELIZABETHTOWN, PA.—Bids will be received until 10 a. m., Dec. 6, by George W. Guthrie, Grand Master, F. and A. M., Masonic Temple, Philadelphia, for the erection of buildings in Elizabethtown. Borie, Zantzinger & Medang, 15th and Walnut Sts., Philadelphia, are Archs.

BALTIMORE, MD.—Announcement has been made at the Builders' Exchange that the contract for the 6-story warehouse to be built at 115 West Fayette St. for J. Wilson Leakin, has been awarded to the W. E. HARN CO., 213 North Calvert St., and that the work of construction would proceed without further delay. The proposed structure is to be of brick construction with stone trimmings and fireproof throughout. It will be equipped with electric elevators, etc.

BALTIMORE, MD.—Bids are asked until 11 a. m., Nov. 30, by J. Sewell Thomas, City Register, for constructing the office and laboratory building and transformer house at the Black River disposal works, as shown on plans on file in the office of Calvin W. Hendrick, Ch. Engr. of the Sewerage Commission.

William A. Foreman, Arch., is preparing plans for a warehouse to be built at 325 West Pratt St. for A. Schuman & Co. The proposed structure will be 40 × 159 ft. and will be four stories high. It will be of brick and stone, with concrete foundation and slag roofing. The girders will be of wrought steel and the framework of structural iron. It will be fireproof throughout.

Bids will be received until noon, Nov. 28, by Joseph E. Sperry, Arch., Calvert Bldg., for constructing a building for the Baltimore Bargain House, to be erected by Jacob Epstein. The structure will be 12 stories high and will take up nearly the entire block bounded by Baltimore, Fayette, Howard and Liberty Sts. It will cost in the neighborhood of $1,500,000, and will be of stone, concrete, brick and steel. The framework is to be of structural iron and the building will be entirely fireproof.

WASHINGTON, D. C.—Bids were received as follows on Nov. 21 by the Commissioners of the District of Columbia for the construction of an addition to the McKinley Manual Training School: Gorml[illegible] & Boynton, $162,000; Thomas H. Melton, $165,2[illegible]0; Davis Construction Co., $170,451; Doyle-Robertson Construction Co., $167,[illegible]; Hoge Luebkert Construction Co., $173,[illegible]; Upton-Smoot Construction Co., $166,000; George E. Wyne, $164,700; all of Washington.

WASHINGTON, D. C.—Property [illegible] 1720 to 1724 (inclusive) F St., N. W., with a 40-ft. lot adjoining it on the west, has been sold to Victor J. Evans, a patent attorney, Ninth and Grant Pl., N. W. Mr. Evans will make arrangements for the erection of a 7-story office building on the site, to be leased to the U. S. Government for the use of the Civil Service Commission. The transaction involved an expenditure of nearly $250,000.

An appropriation of $100,000 was voted recently from the general funds of the Catholic University by the Board of Trustees, for the erection of a new building, which will alleviate present crowded conditions and form a nucleus for further development of the institution. The Rt. Rev. T. J. Shahan, D. D., is Pres.

We are officially advised that the contract to erect a Masonic Temple in Washington by the Ancient and Accepted Scottish Rite of Freemasonry will be awarded in about two weeks. It will be located at 16th and S Sts. The exterior of the structure will be of white marble, with a granite foundation the full width of the building. John Russell Pope, 527 Fifth Ave., New York, is Arch. Cost, $1,000,000.

CLARENDON, VA.—Charles Rauscher has awarded contract to L. H. THOMPSON for stable, carriage house and garage, to be erected here from plans by Milburn, Heister & Co., Home Life Bldg., Washington, D. C.

KINGWOOD, W. VA.—Milburn, Heister & Co., Home Life Bldg., Washington, D. C., have awarded the contract to L. C. POLING, of Parkersburg, W. Va., for a bank building complete, with the exception of fixtures.

MOUNDSVILLE, W. VA.—Bonar & Bartrug, Construction Engrs., have completed the survey of the site of the proposed city building and the erection will be begun shortly. The contract has been awarded to HERMAN HESS, of this city.

DEMOPOLIS, ALA.—James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., has awarded contract for the construction of a post-office at Demopolis to A. ANDERSON & CO., Victoria Bldg., St. Louis, Mo., at $36,922; time, Sept. 1, 1911. Bids were received on Nov. 7 and noted on Nov. 10.

MEMPHIS, TENN.—The Memphis Athletic Club, to be organized by the residents of Memphis, plans to construct an 8-story fireproof structure, 64½ × 148½ ft., with a steel frame. Among those interested in the club are: O. B. Polk, P. P. Van Vleet, N. M. Woods, Anthony Walsh, Harris L. Browne, I. D. Block, Henry Loeb, W. C. Hays, W. H. Burroughs, George T. Brodnax, Elias Gates, I. Samelson, Robert R. Ellis, Nelson E. Taylor, H. O. Bell, Arthur D. Gibson, A. D. DuBose, George Mann, Jr., Max Baumgarten and Joseph R. Meisel. A regular charter application will be filed shortly and pending formal organization, the Security Bank & Trust Co. will act as trustee. Temporary offices have been established at the bank, with Nelson E. Taylor and H. O. Bell in charge. The estimated cost of the building will be $400,000.

CINCINNATI, OHIO.—Myers Y. Cooper, Union Trust Bldg., is preparing for the erection of several new houses in Norwood and Hyde Park. He will build eight dwellings, which will cost about $40,000. Several of the Hyde Park dwellings will be built in the Benvenuto tract. All will be brick residences and bungalows.

COLUMBUS, OHIO.—Bids will be received by Carl E. Steer, Secy., Bd. of Trustees, Ohio State University, until noon, Dec. 7, for furnishing the material and performing the labor for the erection of a Library Building at the Ohio State University, in accordance with the plans and specifications prepared by Allen & Collens, 6 Beacon St., Boston, Mass., on file in the office of the Auditor of State. Noted on Oct. 13 and Nov. 10.

Bids will be received about Dec. 1, for the erection of a 2-story interurban terminal station, at Rich and Third Sts. D. H. Burnham & Co., Archs., Railway Exchange Bldg., Chicago, Ill., prepared the plans and Maetzel, Fresselt & Bassett, American Savings Bank Bldg., Columbus, are the Associate Archs. Cost, $150,000.

CLEVELAND, OHIO.—The Commercial Building Co. has been organized for the purpose of erecting a 6-story mercantile building on a site, 90 × 175 ft., on Euclid Ave., near East Twelfth St., recently purchased from Charles L. Pack, 308 Euclid Ave. The building will be constructed of white tile, steel and concrete, at an estimated cost of $300,000. The officers of the company are: E. H. Baker, Pres.; G. Barthol, Vice-Pres.; T. M. Swetland, Gen. Mgr.; F. L. Swetland, Treas. and R. H. Swetland, Secy.

MARION, OHIO.—Bonds for the proposed city hall were defeated at a recent election. They represented an expenditure of about $100,000. F. R. Allen is Secy. of the Commercial Club.

TOLEDO, OHIO.—At a recent meeting of the Toledo Club it was decided upon that a new club-house be built on the site of the

present building at Madison Ave. and Huron St. George S. Mills, Arch., Ohio Bldg., has been commissioned to prepare the plans. It will be a reinforced-concrete structure, on a lot, 60 x 120 ft. E. H. Cady is Treas. Cost, $200,000.

VAN WERT, OHIO.—Frank L. Packard, Arch., Hayden Bldg., Columbus, has been commissioned to prepare plans for a $100,000 school building in Van Wert.

EAST LIVERPOOL, OHIO.—HINTON & CUNNINGHAM, of this city, have been awarded the contract for the erection of the First Christian Church at East Fourth and College Sts., at an estimated cost of $50,000 and have broken ground for the structure. Thayer & Thayer, of New Castle, Pa., are the Archs.

ANDERSON, IND.—Bids will be received by the Board of Trustees of St. John's Hospital as soon as plans are completed, for the construction of a barn and other buildings on the site of the structures recently destroyed by fire.

PORTLAND, IND.—The Board of Trustees of the Church of Christ will receive bids until Feb. 1, for the construction of a church on West Walnut St.

INDIANAPOLIS, IND.—Bacon & Griswold, Archs., State Life Bldg., are preparing plans on which they will soon receive bids for the construction of a 14-story hotel building in this city, to be known as the Hotel Metropole. The estimated cost is $460,000. The building will be 100 × 120 ft. and will contain 400 rooms. It will be of steel and brick, cement, with tile floors, and a terra cotta cornice. There will be a basement and a sub-basement, marble stairways, a roof garden, etc.

COLUMBUS, IND.—James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., has awarded contract for the construction of a post-office at Columbus to DUNLAP & CO., of Columbus, at $71,611; time, Feb. 1, 1912.

HAMMOND, IND.—Plans and specifications for a new industrial high school have been completed and accepted, and bids will be advertised for at once. The estimated cost is $215,000. exclusive of equipment. The building will be 336 × 172 ft., two stories high, with full basement for gymnasium and swimming pools. Bids will be received by the City School Board.

DETROIT, MICH.—G. A. Mueller, Breitmeyer Bldg., will receive estimates about Dec. 1 on the proposed Carnegie Library, one and a half stories, 92 × 72 ft., to be located at corner of Woodward and King Aves. Ralph Phelps, Butler Bldg., is Secy. of Bd. of Library Committee. Cost, $40,000.

DETROIT, MICH.—G. C. King, Mgr., of the Addison Hotel, Woodward St. and Charlotte Ave., has bought the property next to the present hotel and announces that a 10-story building will be built at a cost of $200,000.

E. W. Smith, Penobscot Bldg., Duluth, Minn., and G. H. Webb, Ch. Engr., Michigan Central Depot, Detroit, are preparing preliminary plans for the proposed $3,000,000 passenger depot for the New York Central R. R. The building is to be of brick and steel, fireproof construction.

STURGIS, MICH.—The Board of Education of Sturgis, George W. Kirkpatrick, Secy., will soon erect a new $60,000 high school.

GRAND RAPIDS, MICH.—Pierre Lindhout, Ashton Bldg., Grand Rapids, has let the general contract for the proposed Wealthy Ave. Baptist Church, Rev. O. N. Van O'sde, Pastor, to O. S. BLAKESLEE & SON, 1004 Wealthy Ave. It will be two stories and basement 136 × 130 ft. Charles S. Westerly, 37 North Division St., Chn. of Building Comn. Cost, $60,000. Architects are taking figures for steam heating.

CHICAGO, ILL.—We are officially advised that the following contracts have been let for the construction of an automobile building on the east side of Michigan Ave., 220 ft. south of 20th St., for L. W. Noyes: Masonry, W. & E. ANDERSON; terra cotta, the NORTH-WESTERN TERRA COTTA CO., 1900 Clybourn Ave.; sheets metal, HARRY C. KNISELY, 2799 Fifth Ave.; glazing, TYLER & HIPPACH, 47 Ohio St.; roofing, M. H. POWELL, Waukegan, Ill.; iron and steel, BUTLER ST. FOUNDRY & IRON CO., 3424 Butler St.; granite, WOODBURY GRANITE CO., 98 Jackson Boulevard. Alfred S. Alschuler, 134 Monroe St., is Arch.

De Forest A. Matteson and Andrew Sandegren, Archs., 164 Dearborn St., have purchased the vacant property at the northeast corner of Lake View Ave. and Roslyn Pl., for $40,000, and plan to erect an apartment building.

EAST ST. LOUIS, ILL.—The Board of Directors of St. Mary's Hospital have decided to erect a 6-story building in the vicinity of 29th and State Sts. Dr. H. J. de Haan is chief of the staff. The hospital belongs to the parish of St. Henry's Church. The cost is estimated at $200,000.

MILWAUKEE, WIS.—Horace A. J. Upham will erect an $80,000 residence at Kenwood Boulevard and Lake Drive. It will be two stories high, of stone and brick. A garage is included in the aggregate cost. A. C. Eschweiler, Goldsmith Bldg., is Arch.

CEDAR RAPIDS, IOWA.—A structure is to be erected here for the Y. W. C. A., it is stated. The cost will be about $86,000. Address the Board of Trade.

MASON CITY, IOWA.—The Minneapolis Threshing Machine Co., of Minneapolis, Minn., plans to construct a branch office and warehouse in Mason City. About $75,000 will be spent on the proposed structures.

MINNEAPOLIS, MINN.—The contract for erecting the 10-story hotel at Tenth St. and Third Ave., has been awarded to the LEONARD CONSTRUCTION CO., 98 Jackson Boulevard, Chicago, Ill.

ST. PAUL, MINN.—Preliminary plans have been drawn by Postle, Mahler & Denson, Archs., for the construction of a 6-story pressed brick and cut stone fireproof wholesale building which will be built by D. C. Shepard, capitalist, at Fifth, Sixth and Wacouta Sts. It will be occupied by Finch, Van Slyke & McConville, wholesale dry goods dealers, Fourth and Sibley Sts. Cost, $350,000.

CATHCART & MAXFIELD, 115 East Fourth St., will erect for the Fidelity Storage & Warehouse Co., a 10-story building at Third and Franklin Sts. The foundation has been built. The cost will be about $100,000.

MISSOULA, MONT.—Bids will be received by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., until 3 p. m., Dec. 27, for the construction, complete (including plumbing, gas piping, heating apparatus, electric conduits and wiring), of the U. S. post-office at Missoula.

ST. LOUIS, MO.—The Anheuser-Busch Brewing Association has been granted a permit to build a storage-house at 914 Pestalozzi St. It will be six stories high, of brick and concrete. Widman & Walsh, Archs., Wainwright Bldg., prepared the plans. Cost, $100,000. Construction will start soon.

EAGLE PASS, TEX.—Bids were received as follows on Nov. 19 by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for the construction of a post-office building at Eagle Pass: Otto P. Kroeger Co., San Antonio, Tex., $63,970; Texas Building Co., Fort Worth, Tex., $80,500; A. Anderson & Co., St. Louis, Mo., $79,862; Campbell Building Co., Salt Lake City, Utah, $69,750; L. R. Wright, Dallas, Tex., $70,000; M. B. Whitlock & Co., Denton, Tex., $69,873; Charles Ochermann, Eagle Pass, $65,355; J. F. Johnson, Denton, Tex., $71,714; J. F. Seed, Eagle Pass, Tex., $82,538; King Lumber Co., Charlottesville, Va., $73,400.

*OKLAHOMA CITY, OKLA.—Bids will be received by James Knox Taylor, Superv. Arch., Washington, D. C., until 3 p. m., Dec. 23, for the installation of a heating and ventilating apparatus in the U. S. post-office at Oklahoma City.

TULSA, OKLA.—The contract to erect a hotel in Tulsa has been awarded to CALDWELL & DRAKE, of Parkersburg, W. Va. Estimated cost, $500,000.

DEMING, N. MEX.—The contract to erect a high school building here has been awarded to ROSCH & LEUPOLD, of Deming. It will be a 2-story structure, of brick. Trost & Trost, Archs,, of El Paso, Tex., prepared the plans. Cost, $40,000.

BELLINGHAM, WASH.—C. Alfred Brietung, Arch., Walker Bldg., Seattle, has completed plans for the 6-story fireproof building, to be erected for the Byron Hotel Co. of Bellingham, on Dock St. Bids on the general contract are now being received. The building will cost about $150,000.

SEATTLE, WASH.—W. D. Van Siclen, Arch., Northern Bank Bldg., is preparing plans for a 6-story and basement apartment building, to be erected on Eighth Ave., between Pike and Pine Sts., for C. K. Sturdevant, 312 Boston Block, and his associates. The building will be 60 × 120 ft., of brick and cement construction, and will cost, when completed, between $90,000 and $100,000.

SEATTLE, WASH.—The J. W. Fales Paper Co., 1261 Utah St., plans the erection of a warehouse to cost $65,000, it is stated.

SPOKANE, WASH.—Keith & Whitehouse, Archs., Empire State Bldg., are preparing plans for a 21-room brick and stone residence on the estate of 35 acres, at Audubon Park, for E. P. Hogan.

TACOMA, WASH.—Plans have been completed by Frederick H. Heath, Arch., Fidelity Bldg., for the erection of two church buildings. One is to be occupied by the First Church of Christ, Scientist, at Division Ave. and I St., and the other is to be the Mason Methodist Episcopal Church at North 28th and Madison Sts. CHARLES E. HEATH, 1031 South Prospect St., has the contracts.

TACOMA, WASH.—See item under Miscellaneous Contracts: "Dock plans."

PORTLAND, ORE.—Plans for a fireproof office building to serve as headquarters for the local district and division headquarters and as a central exchange for the business district are being prepared by the Pacific Telephone & Telegraph Co. P. H. Coolidge, Asst. Gen. Mgr., is in Portland conferring with Portland officials as to the site and special features of the company's proposed building.

PORTLAND, ORE.—Plans have been completed by Whitehouse & Fouilhoux, Archs., Lumberman's Bldg., for the erection of a club building for the Multnomah Athletic Club. It will be located at the southern end of the Multnomah field and will cost approximately $200,000. It will be of steel construction.

LONG BEACH, CAL.—C. B. Mullaly, East Ocean Ave., announces that plans are practically completed for the hotel that he proposes to build at the foot of Alamitos Ave. Mayberry & Parker, Archs., Pacific Electric Bldg., Los Angeles, are drawing the plans. Estimated cost, $1,000,000.

LOS ANGELES, CAL.—The ALTA PLANING MILL CO., Eighth and Alameda Sts., has been awarded the general contract, at $51,507, for the construction of a 5-story Class B, apartment house on West Seventh St., for R. H. Howell. The contract for the plumbing has been awarded to HOWE BROS., at $7,700. The building will be 80 × 112 ft., of concrete, brick and steel. John C. Austin, Arch., Wright and Callender Bldg., prepared the plans.

LOS ANGELES, CAL.—Plans for the proposed Ferguson Building, at Third and Hill Sts., have been completed by G. H. Wyman, Arch., Henne Bldg. The ALTA PLANING MILL CO. has been awarded the general contract for constructing the building, which will cost about $175,000. It will be an 8-story structure, with a foundation of reinforced concrete. The exterior walls will be of pressed brick with terra cotta window sills and trimmings.

HOLLYWOOD, CAL.—Dennis & Farwell, Archs., Currier Bldg., Los Angeles, are preparing preliminary plans for a reinforced concrete fireproof tourist hotel to be built on a 10-acre tract on Olive Hill at Vermont Ave. and Hollywood Boulevard, Hollywood, by a syndicate headed by Dr. A. G. Schloesser. The hotel will cost about $900,000.

SACRAMENTO, CAL.—The Sacramento Country Club plans to build a club-house on the banks of the American River, about ten miles from here, in the Carmichael colony, owned by D. W. Carmichael. About 90 acres will be purchased for tennis courts, golf links, etc. Charles E. McLoughlin is Pres. Estimated cost, $50,000.

SAN DIEGO, CAL.—George W. Kelham, Arch., Post and Leavenworth Sts., San Francisco, has been commissioned to prepare plans for a department store building, to be erected in San Diego, by George W. Marston, proprietor of the Marston Store. It will be of Class A construction, brick and steel, 100 × 200 ft., six or seven stories high.

SAN FRANCISCO, CAL.—Bids will be received until Dec. 7 by the Board of Public Works for the erection of the Lowell high school. Estimated cost, $340,000.

SAN FRANCISCO, CAL.—The following contracts have been awarded, we are officially advised by E. A. Neumarkel, Arch., Mechanics Savings Bank Bldg., for a clubhouse for the San Francisco Turn Verein: General contract, HENRY HALYENBERG, 1342 Fell St., $46,465; iron and steel, CENTRAL IRON WORKS, $5,890; painting, FICK BROS. $1,150; electrical work, A. S. WEIMER, $1,100; plumbing, STROHMEIER & KONIG, $2,950. It will be a 3-story and basement structure, 84.3 × 137.6 ft., of steel, concrete and brick.

*LEWISTON, IDAHO.—Bids were received as follows on Nov. 22 by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, for the construction of a post-office at Lewiston: Sound Construction & Engineering Co., Seattle, Wash., $96,034; Dole & Collins, Lewiston, Idaho, $111,121; Newport Engineering Co., Portland, Ore., $99,800.

NORTH BATTLEFORD, SASK.—The International Harvester Co. will erect a distributing warehouse here, to cost $40,000. Address, M. J. Howell, of North Battleford.

VANCOUVER, B. C.—Bids are being received by W. Marburg Somervell, Arch., Exchange Bldg., for the erection of the proposed terminal and office building for the British Columbia Electric Co., at Carroll and Hastings Sts., Vancouver. The building is estimated to cost about $300,000 and will be five stories, of steel construction, with concrete floor slabs, ceramic tile roof, ornamental iron elevators, metal sash and windows, fire shutters, etc.

STRATHCONA, ALTA.—We are officially advised that the contract to erect a public building here has been awarded to WILLIAM GARSON, of Calgary, at $46,975, by the Dept. of Public Works, Ottawa, Ont.

WATER SUPPLY—IRRIGATION.

*(*Denotes that this work is advertised in Engineering News.)*

BROCKTON, MASS.—The Water Commissioners and the Water Commission of the City Council are considering the construction of a reservoir at Avon. Capacity, 8,000,000 gallons.

FORT GREBLE, R. I.—We are officially advised that bids were received as follows by Lieut. Rodney H. Smith, Constr. Q. M., U. S. A., Fort Adams, R. I., on Nov. 16 for the construction of a 1,000,000-gallon reinforced-concrete reservoir at Fort Greble (a) for work as specified; (b) alternative bid for work as per plan submitted; (c) time: Michael A. McCormick, 4 Sherman St., Newport, R. I., (a) $48,258, (c) 120 days; New Jersey Foundry & Machine Co., 90 West St., New York, (a) $26,920, (c) July 1, 1911; Boston & N. Y. Contracting Co., Boston, (a) $38,739, (c) July 1, 1911; John J. Falvey, Somerville, Mass., (a) $37,000, (c) June 10, 1911; Sperry Engineering Co., New Haven, Conn., (a) $37,520, (c) 110 days; The Conners Bros. Co., Lowell, Mass., (a) $35,340, (c) 9 months; Darling & Slade, Newport, (a) $38,815, (c) July 1, 1911; Robert Wolfenden, Newport, (a) $45,500, (c) 8 months; William Tunny, Joliet, Ill., (a) $31,860, (c) July 1, 1911; Henry G. Porter, Middleboro, Mass., (a) $30,855, (c) 180 days; Simpson Bros. Corporation, Boston, (a) $34,517, (b) $28,028, (c) May 15, 1911.

NEW YORK, N. Y.—Bids will be received by Henry S. Thompson, Comr. Water Supply, Gas and Electricity, until 2 p. m., Nov. 30, for furnishing, driving and connecting wells: Section 1, furnishing, driving and connecting wells at the Bayside pumping station, Boro. Queens. Section 2, furnishing, driving and connecting wells at the Whitestone pumping station, Boro. Queens.

Bids are asked same time and date for hauling and laying water mains and appurtenances in the Boro. of Brooklyn. Section 1, in streets within the boundaries of District No. 3. Section 2, in streets within the boundaries of District No. 4.

NEW YORK, N. Y.—The Board of Water Supply desires to call the attention of contractors to four contracts for the pressure tunnel to be constructed from the Hill View reservoir, beneath the boroughs of The Bronx and Manhattan, to a point near the Atlantic Ave. subway station, in Brooklyn. It is expected that these contracts will be ready for advertising during December, 1910, and attention is now called to them so that the many details of the work may be studied and general familiarity with it gained before it is finally advertised.

This tunnel will be driven at from 250 to 700 ft. below the surface, and will be lined with concrete. It will range from 11 to 15 ft. in finished diameter, and will be constructed from 24 shafts, spaced from 3,000 to 5,000 ft. apart. Its total length will be about 17½ miles. Chambers at the heads of the various shafts are also to be constructed, so that through them and the shafts connections for the delivery of the water into the distribution systems can be made.

Further details and information can be obtained at the office of J. Waldo Smith, Ch. Engr, Room 722, 165 Broadway. Noted on Nov. 3.

*NEW YORK, N. Y.—Bids will be received by the Board of Water Supply until 11 a. m., Dec. 13, for Contract 43, for furnishing and delivering certain apparatus and materials, and furnishing, delivering and installing certain other apparatus and materials, at Ashokan, Kensico and Hill View reservoirs and in various structures along Catskill Aqueduct in Ulster, Orange, Putnam and Westchester Counties. The apparatus and materials consist of 63 6-in. to 72-in. gate-valves, 24 6-in. and 12-in. sluice-gates, ten 6-in. check-valves, two 6-in. stop-valves, seven hydraulic cylinders for gate-valves, two motor driven operating mechanisms, nine hand-operating mechanisms and miscellaneous appurtenances.

TROY, N. Y.—Bids are asked by the Board of Contract and Supply until 10 a. m., Dec. 2, for the labor, services and material for laying about 4,300 lin. ft. of 12-in. c.-i. water pipe, with necessary specials, valves and fire hydrants in a portion of Spring Ave. James N. Riley is Secy.

NIAGARA FALLS, N. Y.—Bids are asked until 3.30 p. m., Dec. 5, by the Board of Water Commissioners for the purchase of equipment. The equipment may be seen at the city pumping station and any information obtained at the office of the Engineer, 4710 Buffalo Ave.

TROY, N. Y. We are officially advised that bids will be asked soon by the Board of Public Works for the extension of water-mains in Spring Ave. to Linden Ave. Estimated cost, $7,500. E. L. Grimes is City Engr.

CORNWALL, N. Y.—The city has voted to build a reservoir to augment the water supply.

PORTCHESTER, N. Y.—The Russell, Burdsall & Ward Bolt & Nut Co., Portchester, will build a 2,400-gallon water-tank.

BUFFALO, N. Y.—The City Council has authorized the Board of Public Works to lay 800 ft. of 6-in. water main, c.-i. pipe, in Roslyn St. and 600 ft. 6-in. pipe in Rutland Ave. Francis G. Ward is Comr. Pub. Wks.

*ATLANTIC CITY, N. J.—We are officially advised that all bids opened on Nov. 1 by the Board of Water Commissioners for furnishing a Corliss or Lentz engine were rejected. Bids are asked until 2.30 p. m., Dec. 2 for one horizontal single cylinder non-condensing Corliss engine. L. Van Gilder is Supt.

*HOHOKUS, N. J.—Bids will be received on Oct. 28 by the Mayor and Borough Council for furnishing material and constructing a system of water supply, consisting of 15,000 lin. ft. 4 to 10-in. c.-i. water pipe high-pressure, together with fittings, specials, hydrants, valves, etc. Bids may be submitted on the material and labor as a whole or separately; material bids f. o. b. cars Erie R. R., Hobokus. Contract has been awarded to PARTRIDGE & SLAVE, White Plains, N. Y. John DeVore is Boro. Clk.

CRANFORD, N. J.—George Preiffer, Jr., 27 Market st., Camden, N. J., is preparing plans for the construction of a water plant here. Estimated cost, $150,000.

*BROOKVILLE, PA.—Bids were received by the Brookville Water Co. on Nov. 19, for furnishing material and constructing a dam and reinforced-concrete setting basin. Approximate quantities: 2,150 yds. earth excavation; 30 yds. rock excavation; 1,510 yds. embankment; 490 yds. rubble concrete; 526 yds. reinforced concrete; 208 yds. plain concrete; 340 sq. yds. slope paving; 230 ft. of 12-in. c.-i. pipe. Contract, we are officially advised, has been awarded to the PITT CONSTRUCTION CO., Fulton Bldg., Pittsburg, Pa. The company will receive bids in gas engines, force pumps, c.-i. pipe, generator, blower, etc. George W. Heber is Secy.

BROOKVILLE, PA.—The AMERICAN WATER SOFTENER CO., 1009 Chestnut St., Philadelphia, has been awarded the contract for a filtration plant for the Brookville Water Co. The plans include a concrete dam, filter plant and pumping station. Earl V. Guyther, Brookville, Pa., is Engr.

DONORA, PA.—We are officially advised that the Donora Water Works Co. has completed the installation of a 16-in. force main which extends from the Borough to the Borough of Monessen on the opposite side of the river. This company will be supplied in the future with filtered water furnished by the Monessen Water Co. A high-service pumping station will be installed to furnish water to the high districts. Chester & Fleming are Consult. Engrs., Pittsburg, and have charge of the engineering work.

*FAYETTEVILLE, N. C.—Bids will be received for the materials and labor in connection with the construction of water-works by the Public Works Commission until noon, Dec. 15. The improvements contemplated consist of furnishing and installing two filter units of 500,000 gallons per day each, together with all piping, machinery and appurtenances connected therewith, the construction of a plain and reinforced-concrete sedimentation basin, filtered water well, etc., and the construction complete of a brick filter and power building. John K. Strange is Engr.-in-Charge, Fayetteville, N. C.

WAMPUM, PA.—The borough has voted in favor of constructing a water plant.

WASHINGTON, D. C.—The LYNCHBURG FOUNDRY CO., Lynchburg, Va., has been awarded contract by the District Commissioners for furnishing 8.5 tons of 16-in., 499.6 tons of 30-in. c.-i. water pipe and 22.3 tons of 16 and 30-in. water pipe specials. Bids were opened on Nov. 9. List of bidders noted on Nov. 17.

PORTSMOUTH, VA.—The Portsmouth & Suffolk Water Co. will install two large pumps in its pumping station, one to have a capacity of 6,000,000 and the other 2,500,000 gallons daily.

DANTE, VA.—The Clinchfield Coal Corporation, 24 Broad St., New York, will let a contract in the winter for the construction of 5½ miles of water mains. Ford, Bacon & Davis are Engrs.-in-Charge, 115 Broadway, New York.

HIGHLAND PARK (Richmond post-office), VA.—The Town Council has awarded the contract to the GLANMORGAN PIPE & FOUNDRY, Lynchburg, W. Va., for hydrants, pipes and valves in connection with the construction of the water-works at about $25,000. Noted on Nov. 17.

WHEELING, W. VA.—Plans are being prepared for constructing a pump-house at the reservoir to house pumps to be used to supply water to Wheeling Heights. Bids will be asked soon.

HIGH POINT, N. C.—The city is considering the issuance of $100,000 of bonds for the construction of water-works.

JOHNSTON, S. C.—The city is considering the construction of water-works.

BARNESVILLE, GA.—The city has decided to install a motor and air compressor for pumping water from deep well at the pumping station into two reservoirs, from which it will be pumped into another reservoir on top of the mountain.

THOMASTON, GA.—The city has awarded the contract to PERRY ANDREWS, Atlanta, Ga., for drilling a well for the water supply to minimum depth of 350 ft. and maximum depth of 500 ft.

ST. PETERSBURG, FLA.—Bonds for $100,000 have been sold for improving the water-works and sewer system, etc.

BOAZ, ALA.—The citizens have voted to issue $20,000 of bonds for the construction of water-works. Bids for construction will be received about Mar. 1. J. B. McCrary Co., Atlanta, Ga., are Engrs.

OSYKA, MISS.—See item under Light and Power Plants.

BENTON, MISS.—Bids are asked until Dec. 5 by the Supervisors of Yazoo County for drilling an artesian well. S. S. Griffin is Clk., Bd., Yazoo City.

RUSSELL, KY.—The city has voted in favor of constructing water-works. Estimated cost, $50,000.

COVINGTON, KY.—The citizens have voted to issue $100,000 of bonds for the construction of a new reservoir in Devon Park, and to maintain the park of 500 acres.

WEST COVINGTON, KY.—The citizens voted, on Nov. 8, in favor of constructing a water plant.

PORTSMOUTH, OHIO.—We are officially advised that the City voted $300,000 of bonds on Nov. 8 for the extension of the water-works. Work will start as soon as the bonds are sold. W. N. Gableman is City Audr.

CLEVELAND, OHIO.—Bids will be received by H. H. Canfield, Village Clk., Cleveland Heights, until noon, Dec. 29, for furnishing the material and labor necessary for the improvement of Euclid Heights Boulevard, from Lee Rd. to Minor Rd., by constructing an 8-in. water main.

ALLIANCE, OHIO.—The Board of Health has approved plans and submitted them to Council for storage basins for the city water-works. The plan contemplates the erection of an additional dam 800 ft. above the present storage basin to increase the capacity by 8,000,000 gallons. The total capacity with the dam and certain excavations to be made will reach 30,000,000 gallons. Estimated cost, $50,000.

SUGARCREEK, OHIO.—We are officially advised that bids will be opened about Jan. 1 by the village for the construction of new water-works to cost $12,500. W. A. Hahn is Corporation Clk. Noted on Nov. 17.

RUSHVILLE, IND.—Contract has been awarded, it is reported, to the HEINE SAFETY BOILER Co., 98 Jackson Boulevard, Chicago, Ill., for new boilers at the water and light plant at $11,068. This does not include the smokestacks.

KALAMAZOO, MICH.—The citizens voted on Nov. 8 to issue $43,200 of bonds for water mains. C. L. Miller is City Clk.

FLINT, MICH.—The citizens have voted to issue $100,000 of bonds for the construction of water-works. D. E. Newcombe is City Clk.

GALESBURG, ILL.—The contract for a new crank and flywheel pump was awarded by the City Council, on Nov. 14, to the SNOW PUMP CO., at $16,890.

WALWORTH, WIS.—Contracts for the construction of water-works from the plans of George Cadagan Morgan, Chicago, Ill., have been awarded as follows: For pipe to the U. S. CAST IRON PIPE & FOUNDRY CO.; valves to LUDLOW VALVE MFG. CO.; pipe laying to WM. TUNNY, Joliet, Ill.; pumping machinery to the GOULD PUMP CO.; tank and tower to the CHICAGO BRIDGE CO., Chicago, Ill. Total cost, $17,000.

PRESCOTT, WIS.—The citizens have voted to issue bonds for the construction of water-works and sewers.

SIOUX CITY, IOWA.—We are officially advised that contract was not awarded on Nov. 12 by the city for the installation of a deep well and turbine and centrifugal pumping outfit.

FAIRMONT, MINN.—The Water and Light Commission has awarded the contract for the new tank and tower to the DES MOINES BRIDGE & IRON WORKS, Des Moines, Iowa, at $5,372.

TRACY, MINN.—The citizens have voted to issue $6,000 of bonds for water-works extensions. Lester J. Fitch is City Recdr.

KENYON, MINN.—C. J. Talle, Village Clk., will receive bids until 8 p. m., Dec. 5, for drilling and completion of a deep well at the pumping station, either 8 or 10. in diameter, and to be not less than 225, nor more than 35, ft. deep. L. P. Wolff is Engr, St. Paul.

NEWTON, KAN.—The citizens have voted to issue $25,000 of bonds for constructing water-works.

CHANUTE, KANS.—Contract has been let to G. JAEGER, Rich Hill, Mo., for furnishing and laying a 16-in. water main at $17,230. W. F. Sams is City Clk.

BEATRICE, NEB.—We are officially advised that contract for improvements to the water-works system, including a 1,000,000-gallon reservoir, addition to pumping station, etc., was awarded on Nov. 16 by the city to MATHEW CONSTRUCTION CO. at $57,000. W. K. Palmer Co. are Engrs., 717-720 Dwight Bldg., Kansas City, Mo.

FARGO, N. DAK.—Bids will be received by E. R. Orchard, City Audr., until 5 p. m., Nov. 28, for the construction of a 6-in. water main in a portion of Fifth Ave. North.

PIERRE, S. DAK.—S. R. Green, Asst. State Engr., Pierre, is making a preliminary survey of the possibilities of irrigation in the Box Elder. This work is a part of the plan of securing by actual surveys the possibilities of all the streams in the state for water-power or irrigation.

MORRISTOWN, S. DAK.—The city is considering the construction of water-works, to cost $10,000.

BELLE FOURCHE, S. DAK.—Bids were received as follows on Nov. 14 by the city for constructing the new water-works system here: L. W. Shruth, Fargo, N. Dak., $33,468; Williams Construction Co., Belle Fourche, $35,484; William Garrard, Spendan, Wyo., $39,414; Wilson Kenny Co., Deadwood, S. Dak., $43,277; KATZ-CRAIG CONSTRUCTION CO., Omaha, Neb., $31,935 (awarded contract); B. W. Gorens, Sturgis, S. Dak., $32,419; Bartlett & Co., Deadwood, $37,087. Samuel H. Lea is Engr.-in-Charge.

The contract for furnishing c.-i. pipe, beams, and grillage bars for the Belle Fourche project, S. Dak., has been awarded by the U. S. Reclamation Service to the MARSHALL FOUNDRY CO., 28th St., Pittsburg, Pa., at $7,697.

LEWISTON, MONT.—We are officially advised that bids will be received early next year by the city for improvements to the water-works system. O. F. Wasmansdorff is City Engr.

WINDSOR, MO.—Bids will be received by L. D. Chrisman, City Clk., until 4 p. m., Dec. 6, for the construction of a system of water-works, comprising a 75,000-gallon tank, on a 100-ft. tower, c. i. pipe, specials, hydrants, valves, etc. Rollins & Westover, are Consult. Engrs., Beals Bldg., Kansas City, Mo.

EASTLAND, TEX.—We are officially advised that bonds for from $15,000 to $18,000 will be isued soon for the construction of water-works. Charles Pellit is City Secy.

ADAIR, TEX.—The city has voted to construct water-works, including a steel tower and tank 125 ft. high and 20 ft. in diameter, with a capacity of 75,000 gallons. Estimated cost, $15,000 to $20,000.

DENNISON, TEX.—We are officially advised that bids were received as follows on Nov. 7 by the city for c.-i. pipe, fittings, etc.: American Cast Iron Pipe Co., $25,761; Dimmick Pipe Co., $27,283; U. S. CAST IRON PIPE & FOUNDRY CO., $25,492 (awarded contract); A. J. Wells, $27,795; R. D. Wood & Co., $23,236.

ALLEN, OKLA.—The city has voted to issue $25,000 of bonds for the construction of water-works. Ekman & Tolbert, Engrs., Ada, Okla., will superintend construction.

ENID, OKLA.—The city has awarded the contract to REARDON & MASKLYNE, Enid, for constructing the pumping station at $9,740. The water will be pumped direct from wells. W. D. Hitchcock is Comr. W.-Wks.

CIMARRON, N. MEX.—Bids will be received by the Cimarron Water Co., until 2 p. m., Dec. 20, for the construction of a gravity supply system of water-works, comprising 26,600 ft. of 8-in. machine-banded wood pipe, together with gate valves, fire hydrants, etc., and a distributing reservoir of 50,000 gallons capacity. T. W. Jaycox is Engr., 1608 Broadway, Denver, Colo.

YACOLT, WASH.—The citizens have voted to construct a gravity water system, bonds for which have been issued. Bids will be opened the latter part of this month. Arthur D. Monteith is Consult. Engr., 824 Chamber of Commerce, Portland, Ore.

SEATTLE, WASH.—Thomas H. Carver, Engr. W.-Wks., has completed plans for the construction of an ornamental water tower at the summit of Beacon Hill, 175 ft. high, 36 ft. square at the base, to be constructed of red brick, faced with gray granite, tile roof.

PORTLAND, ORE.—Several thousand acres in the Willamette Valley have been purchased by Portland men and $1,000,000, it is reported, will be spent to irrigate and otherwise improve the land. John H. Hartog is interested.

A general plan for the extension of water mains in the South East Side has been drawn up by the Commission from the Seventh Ward. Estimated cost, $250,000 to $300,000.

ASHLAND, ORE.—The City Engineer has completed plans for the construction of the new water system. The specifications call for the reconstruction of the present water system, and an extension to the new addition recently annexed to the city. The old reservoir will be torn out and two large reservoirs will be installed. Estimated cost, $160,000. The bonds have been sold.

JACKSONVILLE, ORE.—Bids will be received by the City Recorder until 5 p. m., Nov. 25, for constructing water-works for the city. The work will consist of excavating and back-filling trenches, hauling and laying steel and wood pipe, valves, valve boxes, hydrants, special castings, and constructing storage dam and reservoir for a gravity water system. All labor and material to be furnished by the contractor. Osgood & Cummings, Medford, Ore., are Engrs.

LOS ANGELES, CAL.—Bids will be received Dec. 5 by the Board of Water Commissioners for gate valves, fittings and 2,265 tons of standard c.-i. bell and spigot water pipe.

LA MESA, CAL.—The Lookout Park Mutual Water Co. has let a contract to the J. RICHARDSON CO. for constructing the new reservoir near the company's pumping plant in Fairview Ave.

WHITTIER, CAL.—Bids will soon be asked by the Potrero Heights Land & Water Co. for the construction of a large pumping station and pump-house. B. F. Arnold, 125 South Washington St., is Secy.

ONTARIO, CAL.—The citizens have voted to issue $175,000 of bonds for the construction of water-works. T. E. Trask, Los Angeles, is Engr.

CUCAMONGA, CAL.—The Hermosa Water Co. will extend its tunnel in Deer Creek and lay about 4,000 ft. of 8-in. pipe.

SAN JACINTO, CAL.—O. H. P. Piper, who has purchased 500 acres of land three miles west of here, will install a large pumping plant to irrigate the tract.

LOS ANGELES, CAL.—Dessery & West, Engrs., Union Trust Bldg., are preparing plans and surveys for the drainage and reclamation project on the Broome ranch in Ventura County. The ranch consists of 24,000 acres, and has been leased by the American Sugar Co., which will spend about $10,000 in reclamation work. The work will consist of a series of open ditches and tide gates. Concrete step-downs may be required.

KINGSBURG, CAL.—The city has voted $26,000 of bonds for the construction of water-works and for fire protection.

PETERBORO, ONT.—Plans have been completed and will be submitted to the Provincial Board of Health for the construction of water-works here.

VANCOUVER, B. C.—The report of H. M. Burwell, Engr. W.-WKS., has been completed. He estimates the cost of additional water-works improvements, including construction of an additional main up Seymour Creek to the intake and a high-level main, from Capilano Creek to the Little Mountain reservoir, excluding submerged mains, at $690,000.

GLEICHEN, ALTA.—R. B. Owens, Provincial Engr., is planning a new system of water-works.

SEWERS.

(* *Denotes that this work is advertised in Engineering News.*)

WICKFORD, R. I.—The citizens of this place will apply to the Legislature for permission to construct a sewer and water-works system. The estimated cost is $35,000. Joseph G. Reynolds is Treas.

BUFFALO, N. Y.—We are officially advised that the Common Council has authorized the construction of the following sewers: 15, 12 and 10-in. tile sewer in Tuscarora Rd. and Peconic St., between Abbott Rd. and Potters Rd., and in southwest side of Potters Rd., between Abbott Rd. and Woodside Ave. 10-in. tile sewer in Dante Pl., between Erie and Commercial Sts. 18, 15 and 12-in tile sewer in Lower Terrace, Erie and Dock Sts., and Lower Terrace, between Church and Pearl Sts. 10-in. tile sewer in Worcester Pl., between Kensington and Leroy Aves. Francis G. Ward is Comr. Dept. of Public Wks.

LESTERSHIRE, N. Y.—The contract has been awarded to GEORGE SERAFINA, Binghamton, for the construction of the West Main St. sewer. Other bidders were F. E. Whittemore, C. W. Rose, J. W. Towne.

ROCHESTER, N. Y.—The City Council has passed an ordinance appropriating $500,000 for construction of intercepting sewers.

SEA CLIFF, L. I., N. Y.—The construction of a modern system of sewers and a disposal work in the near future is being considered; would like to hear from engineers. John D. Cosgrove, Sea Cliff, is interested.

BUFFALO, N. Y.—The City Council has ordered a 12-in. tile sewer constructed in Olcott Ave., between South Park Ave. and South Side Parkway, and directed the Comr. of Public Works, Francis G. Ward, Municipal Bldg., to advertise for bids.

NIAGARA FALLS, N. Y.—The READ-CODDINGTON ENGINEERING CO., of this city, has been awarded contract by the Board of Public Works for construction of a sewer in Garfield Ave. and one along the New York Central R. R. north of Suspension Bridge, to care for the new industries and the industrial settlement recently located at the north end of the city. Contract price, $92,050.

BROOKLYN, N. Y.—Bids will be received by Alfred E. Steers, Pres. of the Boro. of Brooklyn, for the construction of sewers in various streets and avenues until 11 a. m., Dec. 7. Plans and specifications may be seen at the office of the Bureau of Sewers, 215 Montague St., Brooklyn.

BROOKLYN, N. Y.—The construction work on a sewer basin at 73d St. and 15th Ave. will soon be started. John R. Pinover is interested.

DUNKIRK, N. Y.—Surveys a… being made for the construction of a se… in James Ave., from Sixth St. to Prospe… …e. L. N Murray is City Clk.

SOUTH AMBOY, N. J.—The … …tract has been awarded to P. J. MON… …South Amboy, N. J., for installatio… sewer in South Amboy at $26,750. Ma… & Smith, Perth Amboy, N. J., are City …

NEWARK, N. J.—Bids will b… …eived for the construction of the Avenu… …nd Dawson St. storm water sewer unt… …5 p. m., Dec. 1, by the Board of Stre… …d Water Commissioners.

CHESTER, PA.—The contr… has been awarded to J. A. MORGAN, 1… W. Third St., for making sewer and wat… …nections with water main in center of …

PITTSBURG, PA.—The citi… of this place have voted $570,000 sew… …nds for reconstruction of a sewer syste… Fry St., $145,000 for construction of Soh… …n drainage basins, $95,000; also constru… …n of relief sewers in 33d St., $125,000, … Negley Run drainage basins, $205,000.

HARRISBURG PA.—Sewer w… be constructed in the following streets: …ycamore St., from 14th to 16th; 18th, fro… …ycamore to Wayne; Paxton, from Hann… to 16th; Showers, from Tuscarora to N… ; Rudy, from Delancy to 20th; Derry, fr… 18th to a point 620 ft. east of that stre… Swatara, from 18th to 20th; Prune, from K… …tinny to Swatara, and Jonestown Road, … …m Cameron to Walnut St. Estimated co… is about $100,000.

LANSDOWNE, PA.—The const… …tion of a sewage disposal plant is being …nsidered for the sewage of the Boros. o… …ansdown, Yeadon, Aldan, Clifton Heights … …d other municipalities in the eastern sec… of Delaware County. A. F. Damon is B…o. Engr.

NEWARK, DEL.—The contract for the construction of a sewage and sewage disposal plant for the Continental Fiber Co., of this city, has been awarded to L. B. JACOBS, Newark, Del. The City Waste Disposal Co., 156 Fifth Ave., New York City, is engineering the work. The plant will be built this winter, and ready to operate early next spring. J. P. Wright is Pres. of the Continental Fiber Co.

BALTIMORE, MD.—The construction of a sewer is planned by the residents of Mount Washington, Pikesville, Plinlico and Arlington. The estimated cost is about $300,000. Calvin W. Hendrick is Ch. Engr. of the Sewerage Commission.

HUNTINGTON, W. VA.—Bids will be received by the Board of Commissions until 1 p. m., Dec. 19 for the installation of two trunk sewers as follows: Single ring brick sewer, 3 × 4 ft., on West 17th St., approximately 2,300 ft.; single ring brick sewer, 3 × 4 ft., West Seventh St., approximately 1,700 ft. John Coon is Comr. of Streets.

LOUISVILLE, KY.—The Board of Public Works yesterday awarded the contract for the reconstruction of the sewer in Preston St., from Water to Fulton, to C. T. McCRACKEN CO., Pittsburg, at $30,798.

DAWSON SPRINGS, KY.—The citizens are reported to have voted a bond issue for constructing a sewer system.

REYNOLDSBURG, OHIO.—An ordinance has been passed by the Village Council for the installation of a sewer in Broad St. W. I. Hempstead is Pres.

AKRON, OHIO.—See item under Streets and Roads.

AKRON, OHIO.—Bids will be received at the office of the Board of Control City Hall, until noon, Dec. 1, for the installation of a sewer in and along Euclid Ave., from Schell Ave. to Wabash Ave. John W. Gauthier is Dir. of Public Service.

BELLFONTAINE, OHIO.—The contract for the construction of the new sewage system for this city was awarded in two sections as follows: First section, E. C. McCONNELL, Kenton, Ohio, at $31,503.85; second section, WILLIAM McDOWELL & SON, Cleveland, at $33,594.64.

YOUNGSTOWN, OHIO.—The contract has been awarded by the Board of Control to JOHN GRADY for the installation of a sewer in Phelps St., at $21,013.

CLEVELAND, OHIO.—Construction of sewers in Rockwell St. and Albany Ave., West Kinzie St. and the west fork of the south branch of the river, will commence soon. The estimated cost is about $810,000.

FOSTORIA, OHIO.—Bids will be received by the Director of Public Service until noon, Nov. 28, for the construction of sewers in Sewer District No. 1, as follows: Clark St., from the sewer on Poplar St. to the center of State St.; State St., from the center of Clark St. to the center of Hissong Ave., and Hisson Ave., from the center of State St. to the west line of the right-of-way of the Hocking Valley Railway Co. Plans and specifications on file in the office of the Dir. of Public Service.

DECATUR, IND.—Bids will be received by G. C. McClure, office of County Surveyor, until 10 a. m., Dec. 3, for the construction of the Frederick J. Koldewey ditch in Union Township.

KALAMAZOO, MICH.—The construction of a pumping station and sewers in Greenwich Pl. and Bryant St. have, it is stated, been decided upon.

ALLEGAN, MICH.—The Board of Public Works has awarded the contract to PETER DEWITT, Grand Rapids, Mich., for the construction of sewers in Marshall, Bond, Herkimer and Division Sts. H. C. Weeks is Pres.

WEST DUNDEE, ILL.—The construction of a sanitary sewer system in West Dundee is under consideration. The estimated cost is $15,850.

WAUKEGAN, ILL.—The contract has been awarded to WILLIAM MAREN, Joliet, Ill., by the City of Waukegan at $17,724, for the installation of sewer in Washburn Park. W. B. Thacher, Waukegan, is Engr.

PRESCOTT, WIS.—See item under Water Supply—Irrigation.

IOWA CITY, IOWA.—The contract has been awarded by the Board of Supervisors to the IOWA BRIDGE CO., Des Moines, Iowa, for the erection of a steel bridge at $8,900.

WEST LIBERTY, IOWA.—The contract has been awarded to C. R. NICHOLS, of Caney, Kan., for the construction of a sewer system at $28,684.

LYONS, KAN.—Plans and specification are being prepared for the installation of a sewer system in this place.

WALTHILL, NEB.—Engineers Smith & Tinley, American Bldg., Sioux City, Iowa, are preparing preliminary plans for vitrified pipe sanitary sewers. Cecil Baughlin is City Clk.

*BUFFALO, WYO.—Bids will be received by the Mayor and Board of Trustees, Buffalo, Wyo., until 8 p. m., Jan. 6, for the furnishing of all material and labor for the construction of a sewerage system. There will be required about 6,390 lin. ft. of 6-in. pipe sewer; 11,540 lin. ft. of 8-in. pipe sewer; 1,010 lin. ft. of 10-in. pipe sewer; 4,340 lin. ft. of 12-in. pipe sewer; 700 lin. ft. of 15-in. pipe sewer; each with necessary house connections; 51 manholes; 15 flush tanks; 22 lamp holes; outlets, and other appurtenances as may be needed. E. L. Clarke is Engr. in Charge.

SEDALIA, MO.—G. W. & A. H. KEMP have been awarded the contract for the installation of a sewer in sewer dist. No. 43. C. E. Bayer is City Clk.

GRANBY, MO.—Plans and specifications have been prepared by Michel & Cook, Joplin, Mo., for the construction of a sewer system. The estimated cost is $18,000. J. W. Dale is Mayor.

TEXAS CITY, TEX.—The Texas City Land Co. will, it is stated, spend $500,000 for the construction of a sewer system.

TEMPLE, TEX.—A company has been formed in Bartlett for the purpose of installing a sanitary sewer system. The estimated cost is about $12,000.

NEOSHO, OKLA.—The contract has been awarded to the UNITED CONSTRUCTION CO., Neosho, for the construction of a sewer system. The estimated cost is $34,905. William Warden is City Clk.

ALBUQUERQUE, N. MEX.—A sewer will be constructed here. It will be completed about March 1.

OLYMPIA, WASH.—Bids will be received until 5 p. m., Dec. 23, for the construction of a sewer in the alley running north and south through block 14, Sylvester's plot, according to plans and specifications prepared by the City Engr. J. R. Dever is City Clk.

SNOHOMISH, WASH.—PHILLIPS & SON have been awarded the contract by the City Council for the construction of the Maple St. sewer, from Fifth to First St., and on First, one block west to the trunk sewer.

BROWNSVILLE, ORE.—The contract has been awarded by the City Council to JOHN R. PENLAND, Albany, for the construction of the main sewer.

CALEXICO, CAL.—Bonds to the amount of $35,000 have been voted for the construction of a municipal sewer system. Plans will soon be completed by City Engr.

HANFORD, CAL.—The City Trustees have adopted plans for extensions to the municipal sewer system. Estimated cost, $63,000.

HUNTINGTON BEACH, CAL.—The Holly Sugar Co., which is erecting a large sugar factory here, will construct a private sewer system, to extend 600 ft. to the ocean, on a special wharf. Engineer Berry, Long Beach, has the work in hand.

SAN BERNARDINO, CAL.—The City Engineer has been ordered to prepare plans and specifications for the installation of sewers in several streets.

SAN FRANCISCO, CAL.—See item under Streets and Roads.

OAKLAND, CAL.—The Hutchinson Co. has been granted permission to install a sewer in Martin St., from Ayala St. to a point 160 ft. easterly.

SALT LAKE CITY, UTAH.—The contract has been awarded DALE L. PITT for the construction of a sewer between South Temple and First South on Second West St.

WINNIPEG, MAN.—The city has decided to immediately call for bids for installing sewers at an estimated cost of $500,000. Address City Engineer, Ruttan.

GARBAGE DISPOSAL.

(* *Denotes that this work is advertised in Engineering News.*)

NEW YORK, N. Y.—Bids will be received by George Cromwell, Pres. Boro. Richmond, until noon, Dec. 27, for furnishing all the labor and materials required for the construction of the furnaces, steam boilers and appurtenances of the Clifton Destructor, Boro. of Richmond.

NEW YORK, N. Y.—Bids were received as follows by William H. Edwards, Comr. of Street Cleaning, on Nov. 22, for furnishing all the labor and materials required for the removal of snow and ice during the winter season of 1910-11 in the following boroughs: Manhattan—C. DeMarco, (1) 45 cts., (2) 61 cts., (3) 62 cts., (4) 62 cts., (5) 47 cts., (6) 44 cts.; Jas. H. Holmes, (1) 45 cts.; Tudelli, Conforti-Serritelle, (4) 49 7/9 cts., (5) 35 5/7 cts., (6) 34 5/9 cts.; J. J. Shea, (3) 53 cts., (4) 49 cts.; Paladino & Fusco, (4) 63 cts.; Thompson Bros., (6) 47 cts.; Canavan Bros., (3) 58 cts., (4) 58 cts., (5) 49 cts.; Vinton Contracting Co., (1) 74 9/10 cts.; Atlanta Contracting Co., (6) 48 cts. Bronx—Seewacha Construction Co., 31½ cts.; C. DeMarco, 37 cts.; Wilkinson & O'Connell, 29 cts.; Melrose Construction Co., 90 cts. Brooklyn—Jas. H. Holmes, 69 cts.; Norton & Gorman, 59 cts.; Cranford Co., 64 cts.; Jas. Marrone, 53 cts.; Charles Cranford, 56 cts.; M. Meagher, 64 cts.; Donlin Contracting Co., 43 7/10 cts.

COLUMBUS, OHIO.—Bids will not be received before the first of the year for the construction of the supplementary garbage disposal works. I. S. Osborn is Engr.-in-Charge.

SAN FRANCISCO, CAL.—Bids have been received from two firms for the construction of each of the city's projected incinerators of the garbage disposal system. The McDonald Engineering Co. offered to build them for $150,000 each. The Destructor Co. bids $123,141 for the Islais Creek incinerator and $132,075 for the North Beach plant. Marsden Manson is City Engr.

STREETS AND ROADS.

(* *Denotes that this work is advertised in Engineering News.*)

BROCKTON, MASS.—The City Engineer is considering plans for the widening of North Main St., from Pleasant to Prospect Sts. It is the intention to make the street uniformly 60 ft. wide. Plans are also being considered for the widening of Main St., from Belmont St. to Allen St.

BOSTON, MASS.—We are officially advised that the contract to construct a macadam road in Addison St., bids for which were received on Nov. 21, by L. K. Rourke, Supt. of Streets, has been awarded to JAMES DOHERTY, 133 Calumet St., Roxbury, at $14,049.

HARTFORD, CONN.—Contracts for State road work, bids for which were received by the State Highway Commissioner on Nov. 14, have been awarded as follows:

Town of Plainfield, 11,230 lin. ft. gravel-telford on the Plainfield-Jewett City Turnpike, to JONES & POLCARO, Willimantic, Conn., $1.70 per lin. ft. for gravel, $2.65 for telford, 70 cts. for rubble drain. This work includes two 12-in., two 15-in., one 18-in. and one 24-in. tile culverts and two reinforced-concrete arch culverts.

Town of Redding, 3,241 lin. ft. gravel-telford road, including two 12-in. and two 24-in. tile culverts on the Danbury-Norwalk Turnpike, to JENKS & GOEPPLE, Wilton, Conn., $1.73 per lin. ft. for gravel, $2.38 for telford, $1 for rubble drain, $4 for masonry walls.

Town of Danbury, 5,550 lin. ft. gravel-telford road on the Norwalk-Danbury Turnpike, to the LANE CONSTRUCTION CORPORATION, Meriden, Conn., $1.15 per lin. ft. for gravel, $1.75 for telford, $1 for rubble drain, $6 per cu. yd. for masonry walls. This work includes one 12-in. and four 15-in. tile culverts and one reinforced concrete arch culvert.

Town of Ridgefield, first section, 11,997 lin. ft. gravel-telford road, including four 12-in., three 15-in., one 18-in. and two 24-in. tile culverts and five reinforced concrete arch culverts, to O. T. BENEDICT, Pittsfield, Mass., $1.93 per lin. ft. for gravel, $2.53 for telford, $1 for rubble drain. Second section, 3,837 lin. ft. gravel-telford road on the Danbury-Norwalk Turnpike, including two 12-in. and three 15-in. tile culverts, to JENKS & GOEPPLE, Wilton, Conn., $1.23 per lin. ft. for gravel, $1.86 for telford, $1 for rubble drain and $4 per cu. yd. for masonry walls.

Town of Canaan, 3,000 lin. ft. gravel-telford road on the Point of Rocks Road, including one reinforced concrete arch culvert, to the T. H. GILL CO., Winter Hill Station, Boston, Mass., $2.41 for gravel, $2.71 for telford, 40 cts. for rubble drain, $4.50 per cu. yd. for masonry walls.

Town of Huntington, 1,887 lin. ft. graded-telford road, including one 24-in. tile culvert and one reinforced concrete culvert, to F. ARRIGONI & BRO., Durham, Conn., $16,500 for the entire grading, with 75 cts. per lin. ft. extra for telford, $1 per lin. ft. for rubble drain.

Boro. of Naugatuck, 3,300 lin. ft. macadam-telford road, including two 12-in. and one 24-in. tile culverts, to the LANE CONSTRUCTION CORPORATION, Meriden, Conn., $1.62 per lin. ft. for macadam, with an extra charge of 85 cts. per sq. yd. for macadam outside the regulation 16-ft. roadway, $2.32 per lin. ft. for telford, $1 per lin. ft. for rubble drain, 60 cts. per sq. yd. for cobble gutters, $6 per cu. yd. for masonry walls. Second section, 6,698 lin. ft. gravel-telford road, including one 18-in. and one 20-in. tile culvert, to LANE CONSTRUCTION CORPORATION, Meriden, $1.15 for gravel, $1.65 for telford, 60 cts. per sq. yd. for cobble gutters, and $6 per sq. yd. for masonry walls.

Town of Norfolk, 6,400 lin. ft. graded-telford road on the Norfolk-Winsted Turnpike, including three 12-in. and three 15-in. tile culverts, to A. D. BRIDGE'S SONS, INC., Hazardville, Conn., $9,057 for the entire grading, 70 cts. per lin. ft. extra for telford, 95 cts. per lin. ft. for rubble drain. Second section, 10,010 lin. ft. graded-telford road on the Norfolk-Torrington Turnpike, including one 12-in., one 18-in., three 15-in., one 24-in. and four 20-in. tile culverts and two reinforced concrete culverts, to the TOWN OF NORFOLK, through its Board of Selectmen, $12,000 for the entire grading, with 50 cts. per lin. ft. extra for telford and 75 cts. per lin. ft. for rubble drain.

Town of Southbury, first section, 5,055 lin. ft. gravel-telford road, including three 15-in. and one 24-in. tile culverts, to CHARLES W. TRYON, Meriden, Conn., $1.44 for gravel, $1.94 for telford, $1 for rubble drain. Second section, 4,500 lin. ft. gravel-telford road, including three 15-in. and six 24-in. tile culverts, to JOSEPH S. BARBARA, Waterbury, Conn., $1.07 for gravel, $1.85 for telford, $2.07 for rubble drain. Third section, 5,970 lin. ft. gravel-telford road, including one 18-in., six 15-in. tile culverts and one reinforced concrete arch culvert, to B. N. BEARD CO., Shelton, Conn., $2 for gravel, $2.75 for telford, $5 per cu. yd. for masonry walls. Complete list of bidders noted last week.

NEW YORK, N. Y.—A concourse and boulevard leading from Queensboro Bridge, in Long Island City, to the southern limits of Queens Boro. to Hillside Ave., in Jamaica, is reported to have been given favorable consideration. Nelson P. Lewis, Ch. Engr. of the Board of Estimate, is interested. Lawrence Gresser is Pres. Boro. of Queens. Estimated cost, $1,000,000.

Bids will be received by Alfred E. Steers, Pres. Boro. of Brooklyn, until 11 a. m., Dec. 7, for regulating, grading, curbing and laying sidewalks on 67th St., from Second Ave. to Third Ave.; also on 80th St., from Twelfth Ave. to Thirteenth Ave, together with all work incidental thereto.

NEW YORK, N. Y.—Bids are asked until 3 p. m., Dec. 8, by the Department of Parks for furnishing all the labor and materials necessary for resurfacing the speedway of Ocean Parkway, between Ave. J and Kings Highway, Boro. of Brooklyn. Charles B. Stover is Pres.

YONKERS, N. Y.—The Common Council plans the following improvements: Straightening, widening and extending Jerome Ave. from the land of the Valley Farms Co. to Central Park Ave.; opening of Prescott St., from the land of the Valley Farms Co. to Elm St.; opening Frederick Ave., from Voss Ave. to Morsemere Ave.; opening Front St., from Midland Ave. to Bronx River Road; opening Armstrong Ave., from Thomas Pl. to Mile Square Road; opening Marlborough Pl., from Vista Ave. to Stratford Ave.; opening Bellevue Pl. to Bolmer Ave.; opening Fairview Ave., from Albemarle Pl. to Mile Square Road. Samuel L. Cooper is City Engr.

HUNTINGTON (L. I.), N. Y.—Alonzo P. Whitson, Town Supt. of Highways, has asked for $58,500 for maintenance of highways in this town this year, and the Town Board has allowed the amount. The specific sums follow: Repairs to permanently improve highways and for oil, $30,000; general repairs, $2,000; for finishing putting gravel on Wall St., $2,000; finishing South Huntington Road, $2,000; for permanent improvement of Vernon Valley Road, $500; for road paralleling the trolley to Northport, $2,500; for permanent improvement of East Beach, Northport, $4,000; permanent improvement of Commock Road, $1,500; permanent improvement of Greenlawn Road, $1,500; Kings Park Road at East Northport, $2,000; stubbing Straight Path, $400; snow removal, $500; miscellaneous, $1,000; Shore Road, west side Huntington Harbor, $1,400; machinery, $200; Fort Salonga Road, $500; Deer Park Road, permanent improvement, $1,500; Main St., Huntington, $5,000.

ADDISON, N. Y.—Five miles of good road is to be built from Painted Post north through the Canisteo Valley towards Addison, by the State Highway Department, Albany.

BUFFALO, N. Y.—The City Council has ordered the paving of Ledger St., between Hertel Ave. and Troost St., 24 ft. wide, with round-edge shale brick on concrete base, and the paving of Barton St., between Auburn and Lafayette Ave., 26 ft. wide, with round-edge shale brick on concrete base, in accordance with plans and specifications on file with Bureau of Engineering, Francis G. Ward, Comr. of Public Works, Municipal Bldg.

SYRACUSE, N. Y.—The construction of a State highway through the villages of Eastwood and East Syracuse is soon to be started. The proposed step is necessary to make connection between sections of the State road from Albany to Buffalo. W. W. Estey is Chn. of Highways Com.

NEWARK, N. J.—Bids will be received until 2 p. m., Nov. 25, by the Shade Tree Commission for laying an artificial stone sidewalk and coping along the Broad St. side of Military Park and Rector Park. James A. Berry is Pres.

The lowest bids received on Nov. 17 for the flagging of Frelinghuysen Ave., from Bigelow St. to Dayton St., was that submitted by Alexander J. Milmoe, 75 Littleton Ave., Newark, at $7,988. The amount bid per sq. ft. of 5-ft. bluestone flag was 17½ cts. The bids for the grading, curbing and flagging of Clifton Ave., from Abington Ave. to Second Ave., received at the same time show that Alexander J. Milmoe is the low bidder, at $5,793. The amount per sq. ft. of 5-ft. bluestone flag was 17¼ cts.

BRADFORD, PA.—See item under Bridges.

WILMINGTON, DEL.—Bids will be received early next year, we are offcially advised, for the construction of about two miles of the Philadelphia and Wilmington Turnpike, survey for which is now being made. George H. McGovern is City Clk., and H. A. Brown, Clk. of the Peace.

FAIRMONT, W. VA.—The Marion County Board of Commissioners has awarded the contract for laying paving on Main St., over its entire length to Farmington, a distance of three miles, to GEORGE LILLEY, County Comr.

WILLIAMSON, W. VA.—The Mingo County Commissioners have approved a bond issue for the construction of a pike from here across the county, a distance of about ten miles. Estimated cost, $60,000.

*WILMINGTON, N. C.—Bids will be received by the Board of Aldermen, until noon, Dec. 22, for paving certain streets. Walter G. MacRae is Mayor, and C. R. Humphreys, City Engr.

BAY MINETTE, ALA.—The County Commissioners of Baldwin County have decided to open up several new roads in Baldwin County. Two of them will pass near Robertsdale. One will be opened from the section line north of Robertsdale to the Pensacola road, which leads into Florida. A third road will be opened from Foley to Magnolia Springs, a distance of six miles. Deeds have already been secured for the right of way, and the roads will be started in the near future.

FT. ST. PHILIP, LA.—Bids will be received until 11 a. m., Dec. 7, by George B. Davis, Q. M., U. S. A., Hibernia Bank Bldg., New Orleans, for the construction of roads and walks at Ft. St. Philip.

AKRON, OHIO.—A resolution has been adopted by the City Council declaring it necessary to improve High St., from Chestnut St. to Miller Ave., by grading, curbing and paving, and by constructing laterals to the sewers in said street; also for the improvement of Bartges St., from St Clair St. to Mattison Ave. John T. Payne is City Engr.

COLUMBUS, OHIO.—Bids were opened on Nov. 17 by Director Holton, of Columbus, for the paving of North High St., between Fifth Ave. and Doderidge St., as follows: For sheet asphalt, Andrews Asphalt Paving Co., Trinidad asphalt with Harris brick gutter and cement filler, $72,344; Bermudex asphalt, with Harris brick gutter and cement filler, $72,800; Trinidad asphalt, with Harris block gutter and tar filler, $73,244; Bermudez asphalt, with Nelsonville block gutter and tar filler, $74,256; Bermudez asphalt, with Harris block gutter and asphalt filler, $74,620; Trinidad asphalt with Nelsonville brick gutter and asphalt filler, $74,700.

A. G. Pugh, of Columbus, California asphalt, with 20th Century brick gutter and cement filler, $79,235; California asphalt, with Nelsonville brick gutter and tar cement filler, $79,690; mixture of California and Trinidad asphalt, with 20th Century brick gutter and cement and tar filler, $80,400.

Joseph Hanreddy, California or Cuban-California asphalt, with tar filler, $80,576.

A. G. Pugh, Columbus, California asphalt, with Mack brick gutter and tar cement filler, $80,600; California asphalt, with Nelsonville brick gutter and asphalt filler, $80,600; Trinidad or Cuban asphalt with 20th Century brick gutter and asphalt filler, $81,565.

W. H. Graham, Trinidad asphalt, with Portsmouth brick gutter and tar and cement filler, $85,239; Trinidad asphalt, with Portsmouth brick gutter and asphalt filler, $7,058.

W. H. Lutchenberg & Co., Columbus, Trinidad asphalt, with Athens brick gutter and tar and cement filler, $95,081; Trinidad asphalt, with Athens brick gutter and asphalt filler, $96,828.

Asphalt block: W. H. Graham, Columbus, New Castle asphalt block., $101,933.

Stone block: A. G. Pugh, Georgia and Salisbury granite, tar and cement filler, $147,671; Medina stone, asphalt filler, $149,291; Salisbury stone, with asphalt filler, $155,447; Georgia stone, with asphalt filler, $155,771; Medina stone, with tar and cement filler, $157,391.

W. H. Graham, Georgia and Medina stone, with tar and cement filler, $148,643; Georgia Medina stone, with asphalt filler, $153,503.

Brick paving: A. G. Pugh, 20th Century brick, $78,335; Athens, Nelsonville or Metropolitan brick, cement filler, $79,307; Portsmouth brick, cement filler, $79,955; Athens, Nelsonville or Metropolitan brick, with tar filler, $79,995.

W. H. Lutchenberg & Co., Columbus, Athens brick, with cement and tar filler, $83,533; Athens brick, with asphalt filler, $89,041. There were no bids for wood block.

MARYSVILLE, OHIO.—The contract for the improvement of the public highway south of Milford Center, Union County, has been awarded to WELSH & JONES, at $4,500.

LISBON, OHIO.—Bids will be received by C. H. Cobourn, County Audr., until 10 a. m., Nov. 30, for furnishing the labor and material necessary to grade the East Liverpool and Lisbon Road.

MARIETTA, OHIO.—Bids for the paving of Montgomery St. were opened on Nov. 15, by the Board of Control, as follows: Putnam & Price, Marietta Block, labor and material, $1.03 per sq. yd.; relaying intersections, 40 cts. per sq. yd.; resetting old curb, 12 cts. per ft.; CISLER & MORSE, Marietta block, dabor and material, 98 cts. per sq. yd.; resetting old curb, 15 cts. per ft.; relaying intersection, 20 cts. per sq. yd. (awarded contract).

ZANESVILLE, OHIO.—We are officially advised that bids will be received early in 1911, for brick paving. Herbert Harris is City Engr. M. L. J. Lodgdon, Service Clk.

CLEVELAND, OHIO.—Bids will be received by H. H. Canfield, Village Clk., of Cleveland Heights, Beckman Bldg., Cleveland, until noon, Dec. 20, for furnishing the material and labor necessary for the improvement of Edge Hill Boulevard to the westerly line of Coventry Road, by constructing a sidewalk on the north side.

KOKOMO, IND.—The Commissioners of Howard County will receive bids until 2 p. m., Dec. 7, for the construction of two gravel roads in Center and Honey Creek Townships, known as the Vocus Road and the Rhinehart Road. A. B. Easterling is County Audr.

MARION, IND.—The Commissioners of Grant County are asking for bids until 2 p. m., Dec. 6, for the construction of the following gravel roads: Road in Pleasant Township, 12,500 ft. in length; road in Richland Township, 15,015 ft. in length; road in Richland Township, 10,326 ft. in length; road in Richland Township, 15,338 ft. in length, and a road in Liberty Township, 15,954 ft. in length. A. Y. Stout, County Audr.

PERU, IND.—The Commissioners of Miami County are asking for bids until 2 p. m., Dec. 6, for the construction of three gravel roads in Washington Township, 10,285 ft., 7,980 ft., and 7,750 ft. in length, respectively, including bridges, arches and draining. Charles Griswold, County Audr.

WABASH, IND.—The Commissioners of Wabash County are asking for bids until 10 a. m., Dec. 6, for the construction of a gravel road in Noble Township. J. P. Noftzger, Audr.

Bids will be received by the Commissioners of Wabash County until 2 p. m., Dec. 6, for the construction of three gravel roads, one in Chester Township, 3 miles in length; one in Paw Paw Township, 2½ miles in length,

and one in Paw Paw Township, known as the Eby Road. J. P. Noftzger, County Audr.

LAFAYETTE, IND.—The Commissioners of Tippecanoe County will receive bids until 10 a. m., Dec. 9, for the construction of a gravel road in Wabash Township, known as the Phillips Road. John P. Foreman, County Audr.

LOGANSPORT, IND.—The Commissioners of Cass County will receive bids until 10 a. m., Dec. 6, for the construction of two gravel roads, one in Harrison Township, and one in Boone Township. George W. Cann is Audr.

LOGANSPORT, IND.—We are officially advised that the bids received on Nov. 15, by the Commissioners of Cass County, for the construction of what is known as the James F. Harvey Road, have been rejected. New bids will be received on Dec. 22. George W. Cann is County Audr.

DETROIT, MICH.—At an election held in Detroit on Nov. 8, the issue was carried to bond the city for $2,000,000 for the construction of good roads and to increase the forced paving from $300,000 to $500,000 a year. Charles A. Nichols is City Clk., and J. J. Haarer, Supt. Paving.

PEORIA, ILL.—The Board of Local Improvements has decided to pave with brick South St., from Adams to Water Sts. The widening of Stone St., from Flora to North Sts., is being considered. George F. Simmons is Pres. of Bd.

OMAHA, NEB.—Contracts for the paving of the alley between 22nd, and 23rd Sts., and J and K, the alley between 24th and 27th and E and F Sts., were awarded to JAMES PARKS at the meeting of the City Council recently. MR. PARKS also received the contract for the paving of 22nd St., from B to D Sts.

The NATIONAL CONSTRUCTION CO. received the contract for the paving of the alley between 24th and 25th Sts. and L and M, and for the paving of 36th St. from Q to Harrison St.

JEFFERSON CITY, MO.—We are officially advised that bids will be received until Dec. 5, for paving with Larvia, 1770 sq. yds., by the City Council. E. F. C. Harding is City Engr.

PINE BLUFF, ARK.—Bids will be received by the Directors of Road Improvement District No. 3, Jefferson County, until Dec. 5, we are officially advised, for the construction of 9.6 miles gravel road. William J. Parks, 107½ Main St., is Engr. Estimated cost, $41,000.

GALVESTON, TEX.—We are officially advised that the bids received on Nov. 14, for the paving the Sea Wall Boulevard, have been rejected. New bids are asked by John M. Murch, Cty. Audr., until Dec. 5.

SEATTLE, WASH.—The following contracts have been awarded by C. B. Bagley, Secy. Bd. of Pub. Wks.: For improving Lane St. and others, W. H. SMITH, at $6,623; Graham St., from Rainier Ave. to 32nd Ave. south, RUFUS BUCK, $5,803; Rainier Ave., from 57th Ave. south, to Ryan St., ANDERSON, PETERSON & CO., $34,802.

The only bid received on Nov. 4, by C. B. Bagley, Secy. Bd of Pub. Wks., was that submitted by the Barber Asphalt Paving Co., for paving 4th Ave. in the Denny Hill Regrade District, at $72,662.

SPOKANE, WASH.—Two modern thoroughfares, each 34 miles in length, known as "the Great Apple Way," will be built the length of Spokane valley, between Spokane and Coeur d'Alene, Idaho, at a cost of $350,000. The preliminary work will be taken up soon and it is expected that actual construction will begin early next spring. The funds required will be contributed as follows: States, 50%; counties, 35%, and landowners, 15%.

The roads will be of oil macadam, 24-ft. center with 4-ft. shoulders and lined on both sides with apple and elm trees.

LA GRANDE, ORE.—The contract for paving 4th St., from Adams Ave. to O St., has been awarded to the WARREN CONSTRUCTION CO., 59 Temple Pl., Boston, Mass., at $2.12 a sq. yd., by the City Council.

LOS ANGELES, CAL.—The following bids have been received by the County Board of Supervisors for improving Central Ave., Tropico Ave. and 6th St., Glendale: F. F. Prendergast, grading and constructing culverts on Section 1, $7,819, oil macadam paving $1.40 per ton for 4,472 tons, grading and constructing culverts on Section 2, $1,160, oil macadam paving, $1.40 per ton for 1,980 tons, Class A concrete, $15 per cu. yd., Class C, $14, steel, 6 cts. a lb.

W. M. K. Peasley, grading culverts, Section 1, $5,000, paving, $1.75 per ton, grading and culverts on Section 2, $550, paving, $1.75 per ton.

For improving the La Canada Verduga Road, W. M. K. Peasley, $13,883, Class A concrete, $13 per cu. yd., Class C, $12, steel, 4 cts. a lb., rubble walls, $5 per cu. yd. F. D. Donegan, $14,200, Class A concrete, $15, Class C, $14, steel, 5 cts, rubble walls, $4.50 per cu. yd. A. C. St. John, $15,000, Class A, $15, Class C, $13, rubble wall, $3 per cu. yd.

LOS ANGELES, CAL.—The Board of Public Works has awarded contract to the FAIRCHILD GILMORE WILTON CO. for the paving of South Park Ave., from Jefferson St. to 58th St., at $73,000. The paving will be of asphaltum.

RIVERSIDE, CAL.—The city engineer is preparing plans and specifications for the improvement of Denton St., from Pachappa to Victoria Ave., Center St. east of Denton Ave., Prospect Ave., from Center St. to Pachappa Ave. The amount of work involved includes the paving and curbing of 55 city blocks, together with the construction of gutters, sewers and culverts. Estimated cost, $85,000. Bids will be asked for soon.

SAN BERNARDINO, CAL.—The City Council has ordered the construction of a cement sidewalk on C St., also grading and paving of E St., together with the construction of culverts and gutters thereon. L. B. Lothrop is Supt. of Streets.

FORT MASON (San Francisco Post-office), CAL.—The contract to construct an asphalt road between the Lombard St. gate and guard-house here, has been awarded to FLINN & TREACY, First National Bank Bldg., San Francisco, at $9,900, by Maj. George McK. Williamson, O. M., U. S. A.

SAN FRANCISCO, CAL.—Bids are asked by the Board of Public Works until Nov. 30, for regrading and resewering Beale St. Robert J. Loughery is Secy.

ST. CATHERINES, ONT.—The WARREN PAVING CO., of Toronto, has been awarded the contract for paving King and Queenston Sts., at $59,000. Other bidders were Thomas Riley, $61,997; Newman Bros., $61,684; City Engineer, $62,865.

MANUFACTURING PLANTS.

(Denotes that this work is advertised in Engineering News.)*

AUGUSTA, ME.—The contract has been awarded to the FLETCHER-LAHEY CO., of Boston, Mass., for the erection of a pulp grinding mill for the Cushnoc Paper Co., of this city. The proposed mill will be 75 x 60 ft., four stories in height and will be of reinforced concrete and brick construction. It will be located at the west side of the company's present mill at the east end of the Kennebec dam. The cost will be about $40,000. Noted last week.

SACO, ME.—The York Mfg. Co., 88 Broad St., Boston, Mass., has purchased about 1,000 acres of land in this city and Old Orchard from the McCorkle Abattoir Co., for $110,000. It is the intention of the former company to build a cotton mill and homes for workmen.

ROCHESTER, N. Y.—The Rochester Can Co. has plans in preparation by J. Mills Platt, Arch., Cutler Bldg., for a brick factory, two stories high, to be erected, next spring, on Hague St.

Crandall & Strobel, Archs., Ellwanger & Barry Bldg., have completed plans for a 1-story and basement dye house, 125 x 175 ft., of brick, stone and structural iron, to be erected by E. B. Leary at Lake and Driving Park Aves. Estimated cost, $60,000.

BUFFALO, N. Y.—Berrick & Meyer, 1151 Main St., have completed plans for a 4-story basement stone and light manufacturing building, 155 x 150 ft., on Main St., near Northampton. It will be of brick and steel construction. Cost, $60,000.

BUFFALO, N. Y.—The Kelker Blowing & Forging Co., which has its factory at Elk and Katherine Sts., Buffalo, has secured an option upon a large tract along the Pennsylvania R. R., between Milton and Harrison Sts., with the intention of purchasing the site and erecting a factory on it.

BUFFALO, N. Y.—The Buffalo Box Co. has filed plans for a factory, of brick, at 10 Scoville St. Cost, $14,000.

UTICA, N. Y.—The Frisbie & Stanfield Knitting Co. has awarded the contract for the new mill of the Kendall Knitting Co., which it now controls, to HENRY KASSING and GEORGE SHIPPY, of Utica. The building is to be ready for occupancy by April 1. The estimated cost is $30,000.

JERSEY CITY, N. J.—The Reddisode Textile Co. has filed articles of incorporation to manufacture cotton, cotton seed, cotton mill wastes, press cloth, etc. The incorporators of the company, which is capitalized at $50,000, are: E. W. Thompson and W. A. Reynolds, of Charlotte, N. C.; L. W. Haskell, E. E. Coles, New York, and T. S. Young, East Orange.

NEWARK, N. J.—A factory plot has been purchased in Newark by the American Mono-Service Co. from the Woodside Tanning Co. upon which a 2-story factory, 200 x 100 ft., costing about $50,000, is to be erected. The property, which was sold through Louis Schlesinger, is located on Verona Ave. and Oraton St., having a frontage of over 400 ft. and running to the Newark and Paterson branch of the Erie R. R. The American Mono-Service Co. will manufacture paper receptacles.

PHILADELPHIA, PA.—Peuckert & Wunder, Archs., 310 Chestnut St., are preparing plans for a 1-story brick addition to the factory at Vankirk St. and the Delaware River. The National Ammonia Co. of Pennsylvania, is the owner. It will be 73 x 48 ft., with a slag roof. The architects are receiving bids.

PITTSBURG, PA.—The High Grade Oil Refining Co. plans the erection of three refineries in the Pennsylvania oil fields. A 10-acre tract is wanted, and the first refinery will be erected in the Butler district. The officials claim they have a production of 30,000 barrels a month already signed up, and when they get 40,000 barrels signed they will begin operations. The company is capitalized at $10,000,000.

WILMINGTON, DEL.—Connell & Pierson, Archs., 834 Market St., this city, are preparing plans and will soon be ready for bids for a laundry to be built at 605 Shipley St. for the I X L Laundry. It will be a brick structure, three stories in height.

BALTIMORE, MD.—The Canton Box Co., at an outlay of $60,000, will construct a concrete and steel packing-box factory on Boston St. It will be two stories high and 120 x 125 ft. The exterior and foundation will be of concrete, while the framework will be of structural iron. Wrought steel girders will be used. Plans and specifications are now being prepared by Wilson L. Smith, Arch., Law Bldg., upon completion of which bids will be received.

Eugene G. Mergenthaler will build a machine shop adjoining his present plant on Hollingsworth St., between Light and Calvert Sts., two stories high, of brick, stone and steel and 20 x 40 ft. It will be equipped with steam heat and electric lighting. GEORGE REPP, 14 Stinson St., who prepared the plans, has been awarded the contract to build it.

BALTIMORE, MD.—The Faline Waterproof Co. has been incorporated and will manufacture waterproof clothing. Alva Hubbard, 409 St. Paul St., is one of the incorporators, and will probably have charge of construction of the factory.

Bids will be received by Otto G. Simonson, Arch., American Bldg., until Nov. 30, for the construction of a printing establishment for the Simpson-Doeller Co. It will be a 2-story and basement structure, 240 x 217 ft., fireproof, of concrete, brick and stone. Bids for equipment and mechanical work will be asked for separately. The estimated cost of the building is $100,000, and the equipment, $40,000.

WESTMINSTER, MD.—The CENTRAL CONSTRUCTION CO, 222 St. Paul St., Baltimore, has been awarded the contract to build a residence for Charles King near Westminster. It will cost about $45,000. The drawings, which were prepared by W. A. Foreman, Arch., call for a structure of ornamental stone, with marble and granite trimmings. It will be two and a half stories high.

NORFOLK, VA.—The Norfolk Steam Laundry Co. has been organized, with a capital stock of $50,000, and proposes to establish a laundry. D. Levitin is Pres.

RICHMOND, VA.—James E. Crass, Jr., of this city, who has just completed a flying machine of his own design, plans the erection of an aeroplane factory. A company will be organized under the name of the Crass Aeroplane & Exhibition Co., to promote the project.

BIRMINGHAM, ALA.—Improvements costing more than $100,000, and necessitating an increase of from 70 to 200 skilled employees, are to be made by the Southern Automobile Co.

EUFAULA, ALA.—The Barbour Cotton Mills will be continued by the Glenola Cotton Mills, recently incorporated with a capital stock of $50,000. The plant has 5,800 ring spindles, 148 broad looms, etc., for the production of cotton cloth, which has been overhauled and put in good condition. Officers for the new company have been elected as follows: Pres., John P. Foy, also Pres. of the Commercial National Bank of Eufaula; Vice-Pres., E. P. Thomas; Sec.-Treas., C. A. Covey.

COVINGTON, KY.—The Louisville & Nashville R. R., a subsidiary of the Atlantic Coast Line R. R., is planning to build new yards at Covington. There will be 27 tracks and other improvements. W. H. Courtnay is Ch. Eng., at Louisville.

COLUMBUS, OHIO.—The Baltimore & Ohio R. R. Co. contemplates the erection of shops some place along the line west of Pittsburg, and the Columbus Chamber of Commerce is making a strenuous effort to secure their location in Columbus. C. W. Galloway, of Baltimore, Md., is Gen. Supt.

CLEVELAND, OHIO.—A permit was issued recently for the erection of a knitting factory to be erected by the Case School of Applied Science at Euclid and East 61st St., for the N. J. Rich Knitting Co. It will employ over 300 employees. Cost, $150,000.

PORTSMOUTH, OHIO.—The contract for the construction of a plant for the Heer Engine Co., on the Chillicothe Pike, near Portsmouth, has been awarded to DEVORE & McGORMLEY.

MOROCCO, IND.—The Farmers Elevator Co. has been incorporated to build and operate a grain elevator. I. J. Biesecker, J. M. Clizum and C. E. Triplet are Directors.

BATTLE CREEK, MICH.—R. & J. Llewellyn, First National Bank Bldg., Chicago, Ill., have let the general contract for the proposed 2-story and basement printing building, 30 x 80 ft., for C. E. Thomas, Battle Creek, to H. V. SNYDER & SON, 55 South McCamly St., Battle Creek. The Lorine Printing Co. is the lessee.

DETROIT, MICH.—We are officially advised that the contract to erect four 1-story buildings of reinforced concrete, for the Auto Parts Mfg. Co., has been awarded to ROY HABERKORN, 169 Seward Ave. Estimated cost, $140,000.

Louis Kamper, Fine Arts Bldg., has, let the following contracts for the 4-story factory, 254 x 61 ft., for the Universal Motor Truck Co., Grand Trunk R. R. and Farnsworth Ave.: Masonry, to the STERLING ENGINEERING & CONSTRUCTION CO., Milwaukee, Wis.; composition roofing, to the EAGLE CORNICE & ROOFING CO., Fort and 24th Sts.; painting, to WILLIAM DIEDRICH, 680 Gratiot Ave. Cost, $50,000. Same architect is also preparing plans for a 1-story boiler house, 56 x 38 ft., for the Universal Motor Truck Co. Estimates will be taken immediately on same.

The same architect has let the structural iron work and masonry to CHASE & SCHUTZ, Chamber of Commerce Bldg., for the 2-story addition, 70 x 75 ft., to the present plant of the Kling Brewing Co., 1424 Jefferson Ave.

Malcomson & Higginbothom, Moffat Bldg., have let the general contract for the 3-story and basement factory, 67 x 200 ft., for Edmunds & Jones, 436 Lawton Ave., to LE LISLE & CULBERTSON, Home Bank Bldg. The plant will be used for the manufacture of auto lamps. The cost, $50,000.

The Yemans Box Co. has filed articles of incorporation to deal in lumber and lumber products. The capital is placed at $50,000, of which $41,000 has been paid in cash. Frank E. Yemans, of Detroit, is interested.

DETROIT, MICH.—Louis Kamper, Fine Arts Bldg., has let the following contracts for the Hale Motor & Machine Co., care of Seymour E. Hale, of the Ritter Mfg. Co., North Grand Boulevard and Russell St.; Masonry, to OTTO MISCH, Home Bank Bldg., Detroit; carpentry, to ALFRED PERRY, 272 Clark St.; steam heating, to ERNST BROS., 414 Woodward Ave. It will be a 2-story structure, 65 x 200 ft. Cost, $28,000.

John Scott & Co., Ford Bldg., Detroit, is receiving estimates on a 3-story and basement meter shop, 36 x 50 ft., for the Detroit City Gas Co., C. S. Ritter, Secy., Gas Office Bldg. V. F. Dewey is Engr.

Albert Kahn & E. Wilby, Trussed Concrete Bldg., have let the contr[illegible] for the cleaning and dyeing factory, for Benjamin Kaufman, 52 East Baltimore Ave., to W. H. POCOCK, Home Bank Bldg., Detroit. It will be two stories high, 80 x 1[illegible] ft. Cost, $22,000.

The same architects have let the following contracts for the Roller Bearing [illegible]: General contract to JACKSON & [M]AURICE, Hart and Charlevioux Aves.; steam heating, to WILLIAM McFADDEN, 301 Woodward Ave. Cost, $50,000.

Smith, Hinchman & Grylls, 710 Washington Arcade, will receive bids until N[ov.] 30 on the 1-story concrete factory, 65 x 304 ft., for the Buhl Malleable Co., Arthur [M.] Buhl, Pres., Wright and Adair Sts. The plant is to be used for a steel foundry. Cost, $30,000.

JACKSON, MICH.—W. N. Far[illegible], Commonwealth Bldg., Jackson, let the general contract for the 1-story car house, [illegible]2 x 18[illegible] ft., for the Michigan United R. [R.], A. W. McLimont, Secy., 118 East Main St., Jackson, to GEORGE BRADY & SON, 16 Merrell St. Cost, $25,000.

MT. CLEMENS, MICH.—Peter [illegible]ederich, Chamber of Commerce Bldg., Detroit, is preparing plans for a creamery in Mt. Clemens for the Detroit Creamery Co., A. Easter, Gen. Mgr., Grand River and Cass Ave., Detroit.

PONTIAC, MICH.—W. E. Wood, Ford Bldg., Detroit, is preparing plans for a 1-story brick and steel machine shop, 160 x 150 ft., for the Catercar Auto Co., of Pontiac. Cost, $25,000.

Slater Pardee, of Pontiac, has let the general contract for the laundry plant, two stories and basement, 86 x 96 ft., for the Trojan Laundry Co., F. S. Burgess, Mgr., 11 Grand River Ave., to the SLATER CONSTRUCTION CO., of Pontiac. Cost, $25,000.

CHICAGO, ILL.—The contract to build a 3-story factory, at 37th and Jasper Sts., for the Floor Cleaning Co., has been awarded to E. W. SPROUL, 215 Dearborn St. Alfred S. Alschuler, Arch., 39 Jackson Boulevard, prepared the plans.

JANESVILLE, WIS.—SHEARER, FORD & BROS. have been awarded the contract for erecting a car barn for the Jonesville Traction Co. The building is to be fireproof, of brick and steel.

MILWAUKEE, WIS.—An independent brewing concern is being organized in the city by Carl Heim, with a capital stock of $100,000. A plant is to be erected at North Milwaukee, plans for which are now being prepared.

A. D. Meiselbach has organized a company, with a capital of $100,000, to manufacture bicycles. Plans are being prepared for factory buildings to be erected at North Milwaukee. Orders for 30,000 bicycles have already been received, it is stated.

Announcement has been made by The Milwaukee Electric Ry. & Light Co. that it will erect a shop building on 40th St., to take care of its interurban traffic. Cost, $20,000.

The Pabst Brewing Co. will erect a liquid carbonic plant at Winnebago and Ninth Sts., in connection with its plant. Cost, $10,000. H. DANISCHEFSKY has the mason contract.

The Novelty Dye Works will erect a 3-story brick plant to replace the one recently destroyed by fire. Cost, $10,000.

TOMAHAWK, WIS.—The Tomahawk Paper & Pulp Co. is planning the erection of a pulp mill, with a capacity of 30 tons daily.

MASON CITY, IOWA.—The Chase Mfg. Co. has been organized with a capital of $200,000. A factory will be built in the southern part of the city. Charles F. Chase is Pres.

PITTSBURG, KAN.—The Western Steel & Iron Co., with a capital of $500,000, has been chartered by the State to build a steel plant at Pittsburg. The incorporators are: George H. Holzbog, Jefferson, Ind.; W. A. Cox, Baltimore, Md.; J. N. Haymaker, Wichita, Kan., and Walter Baird and D. A. Synder, Pittsburg, Kan.

OMAHA, NEB.—The Omaha Tent & Awning Co. has purchased property at the southeast corner of Twelfth and Harney Sts., for the purpose of erecting a 6 or 8-story building.

ST. LOUIS, MO.—The National Gas Machine Co. was recently incorporated with $100,000 capital stock. The incorporators are: Henry G. Wernimont, Bert F. Fenny, M. Laux and R. G. Lewis. It is their object to locate a factory in St. Louis, manufacturing gas machines and devices for making and supplying gas.

The Sexton Manufacturing Co., of Fairfield, Ill., is completing arrangements for the establishment of a branch knitting mill at St. Louis. This company has purchased a 150 x 220 ft. building for $25,000, and will remodel it, besides erecting an additional structure to have a floor space of 20,000 sq. ft. The St. Louis plant will probably reach more than $100,000.

*FORT SILL, OKLA.—Bids will be received by Capt. David L. Stone, Const. Q. M., until 10 a. m., Dec. 15, for the construction of a cold storage and ice plant in the power house, new artillery post, Fort Sill.

CHEHALIS, WASH.—The Pacific & Silo Co. has leased property near the Chehalis Ice Plant, for the purpose of erecting a factory. W. A. Brisker is interested.

GODFREY, WASH.—The sawmill plant of the Enterprise Lumber Co. here, on Kettle River, which was recently destroyed by fire, will be rebuilt, it is reported.

GEORGETOWN, WASH.—Bids are now being received by Hans Pederson, 23 Madison Block, Seattle, for mill construction on the round-house to be built here for the Oregon & Washington Ry. Co. There will be two 1-story buildings, 100 x 250 ft., and 22 x 80 ft. They will be fireproof, of reinforced concrete construction. The piling contract has been let to GEORGE PALMER,

and the iron work contract to the VULCAN IRON WORKS, of Seattle. Estimated cost, $50,000.

KENTON (Portland post-office), ORE.—The Westrumite Paving Co. has purchased five acres of land here from the Kenwood Land Co. for the purpose of erecting a paving plant. The building and machinery will cost $60,000.

PORTLAND, ORE.—BINGHAM & McCLELLAN have been awarded the contract for the erection of an annex to the plant of the National Cold Storage & Ice Co. The addition will be 100 × 100 ft., on the southeast corner of East Water and East Stark Sts., and will be four stories high. The cost of the structure will be between $35,000 and $40,000.

LOS ANGELES, CAL.—The Concrete Appliances Co. has been incorporated here for $500,000. The directors are: F. O. Engstrom, F. E. Engstrom, O. A. Stande, J. Gysin and G. T. Hackley.

The RICHARDS NEUSTADT CO., Wright and Callender Bldg., have prepared plans for, and will construct, a 1-story brick factory building on Hunter St. for H. W. Heller. It will have concrete footings, brick walls, wood truss roof, covered with composition roofing paper, skylights, etc. The building will be 40 × 126 ft. It will be occupied by the Odell Mfg. Co.

LOS ANGELES, CAL.—The Stockwell-Haley Co. has awarded contract to C. E. BERG, Lankershim Bldg., for the erection of a 4-story brick factory building, to be erected at Alameda and Fourth Sts. It will be 80 × 200 ft. R. B. Young & Son, Lankershim Bldg., are the Archs. Cost, $42,500. The factory will be devoted to the manufacture of furniture, draperies, etc.

VERNON (Grafton post-office), CAL.— C. FALLOWS, Central Bldg., Los Angeles, has the contract for the erection of three buildings for the Braun Chemical Co., in Vernon. A factory, 110 × 118 ft., heavy frame construction; an engine house, 37 × 38 ft.; an office and laboratory building, 21 × 25 ft.; a tank support, 12 × 27 ft. W. J. Saunders, Wright & Callender Bldg., is Arch.

SANTA ROSA, CAL.—The Pioneer Laundry Co. plans to establish a laundry on the southwest corner of Fourth and Davis Sts. Plans are being prepared.

CUCAMONGA, CAL.—The contract to erect a packing house for A. Gregory has been awarded to F. S. WILLIS. It will be of reinforced concrete.

REDLANDS, CAL.—Gregory & Langford, of Redlands, are considering the erection of a packing house and fertilizer factory near the Atchison, Topeko & Santa Fe Ry. tracks in Redlands.

PASADENA, CAL.—Leo G. Haase, manufacturer of concrete specialties, of Oak Park, Ill., and H. A. Baldridge, will erect a factory here for the manufacture of concrete lawn markers, street sign posts, lawn vases, lamp posts, fence posts, park and cemetery specialties.

SANTA ANA, CAL.—The Irvine Co., James Irvine, Pres., formerly of the Southern California Sugar Co., will erect a beet sugar factory on Irvine Beach, five miles from here, to be in operation for the season of 1912. Estimated cost, $600,000.

RENO, NEV. The Riverside Mill Co. plans to erect an addition, which will double the capacity of the present plant. Paul D. Roberts is one of the officers. Estimated cost, $30,000.

ELY, NEV.—The Girout Consolidated Mines Co., plans to construct a reduction plant here, it is stated. Thomas F. Cole is Pres.

MONTREAL, QUE.—The Steel Radiation, Ltd., a newly formed merger, with headquarters in Toronto, Ont., and Sir Henry M. Pellatt as Pres., has purchased a site on the banks of the Lachine Canal here, where it is intended to erect a foundry plant. It is expected that construction will be begun as soon as possible and the plant will be in running order next year.

QUEBEC, QUE.—The Canada Cement Co. has purchased the partially completed plant of the Eastern Canada Portland Cement Co. near the city of Quebec. The price paid was about $600,000. As soon as the demand will warrant, it is the intention of the Canada Cement Co. to complete and put in operation the Eastern Canada plant. The directors have also decided on the erection of a new mill at Winnipeg, Man., from which it will supply the trade throughout the provinces of Manitoba and Saskatchewan.

PORT ARTHUR, ONT.—Allied interests connected with the Ironclad Co., of New York, will establish a factory here for the manufacture of enamelware of all kinds, erecting works costing $500,000 and employing 300 hands. The city has given a free site of five acres, holding an additional five acres for the Company's future development; exemption from all taxes, excepting school, for ten years, and guaranteeing 50 per cent. of the Company's bonds. Robert Greig, Lumsden Bldg., Toronto, is representing the Company.

SAULT STE. MARIE, ONT.—The Lake Superior Corporation plans to build a paper mill here at an estimated cost of $1,000,000. W. C. Franz, is Mgr.

MISCELLANEOUS CONTRACTS.

(*Denotes that this work is advertised in *Engineering News*.)

U. S. RECLAMATION SERVICE.—All news concerning canal and irrigation projects, etc., will be found under Water Supply—Irrigation.

ENGINES.—Watertown, Mass.—Bids are asked until Dec. 1 by the Commanding Officer, Watertown Arsenal, Watertown, for the purchase of the following condemned ordnance property: Two steam engines, one automatic engine.

GRADE CROSSING ABOLITION.—Taunton, Mass.—The city is considering the abolition of grade crossings. Plans are being prepared by Barrows & Breed, Engrs.

RIPRAP.—Boston, Mass.—Bids were received on Nov. 17 by Col. Frederic V. Abbot, Corps. Engrs., U. S. A., Boston, for riprap for dike and breakwater at Princetown Harbor and House Point Flats, as follows: Price bid per ton of 2,000 lbs. for (a) dike, House Point Island Flats; (b) breakwater, Long Point: John Cashman & Sons Co., Quincy, Mass., (a) $2.10, (b) $2.10; Rockport Granite Co., Pigeon Hill Granite Co., Rockport, Mass., (a) $2.23, (b) $2.23; The Breakwater Co., Philadelphia, Pa., (a) $1.40, (b) $1.40; Rowe Brothers Co., Richmond, Me., (a) $2.39, (b) $2.39.

DREDGING.—Boston, Mass.—The contract has been awarded by the Harbor and Land Commissioners, Boston, to the BAY STATE DREDGING CO., 185 Summer St., Boston, for dredging Lobster Cove, Gloucester, Mass., about 80,000 cu. yds., at 23⅛ cts. per cu. yd. Bids were opened on Nov. 18.

BALLOON.—Boston, Mass.—Bids will be received by the Association of International Aeronautical Pilots for a 5,000 and a 6,000-meter rubber-silk balloon suitable to hold hydrogen gas and be used in crossing the continent from the Pacific to the Atlantic Ocean. Charles J. Glidden is Pres., Hotel Somerset, Boston. Noted on Nov. 17.

REMODELING STEAMERS.—Boston, Mass.—The contract for remodeling the three steamers of the New England Navigation Co., "Massachusetts," "Bunker Hill" and "Old Colony," which are to replace the "Yale" and "Harvard" on the run between New York and Boston, has been awarded to the WILLIAM CRAMP & SONS SHIP & ENGINE BUILDING CO., Beach and Ball Sts., Philadelphia, Pa. The work will cost approximately $500,000. The vessels will be converted into thoroughly equipped passenger carriers. The boats, operated formerly as freighters, will be stripped to the hull and an entirely new superstructure erected.

BASEBALL PARK.—The Boston American League Baseball Club will lay out a baseball park to cover 30,000 sq. ft. A 3-story grandstand will be erected. Estimated cost of park and grandstand, $1,000,000. John I. Taylor is Pres.

TOWBOATS.—Boston, Mass.—All bids opened on Nov. 14 by the Metropolitan Park Commission for furnishing towboats for breaking ice in Charles River Basin have been rejected. New bids are asked until Nov. 28. The towboats are to be not less than 70 ft. × 19 ft. beam and shall have 250-HP. engines. John R. Rablin is Engr.

PILES.—Everett, Mass.—Bids are asked until Nov. 25 by the Board of Public Works, J. Arthur Benner, Chn., for furnishing and driving piles.

DREDGING.—Boston, Mass.—The following bids were received on Nov. 18 by the Harbor and Land Commissioners, George E. Smith, Chn., for dredging 96,000 cu. yds. at City Point, South Boston: EASTERN DREDGING CO., 247 Atlantic Ave., Boston, Item (1) 21.9 cts. and Item (2) 28.1 cts. (awarded contract); C. M. Cole, 23 and 27 cts.; Bay State Dredging Co., 22½ and 30 cts.; J. P. O'Riorden, 26⅝ and 29⅝ cts.

*DREDGING.—New Haven, Conn.—Bids are asked by Lt.-Col. Harry Taylor, Corps Engrs., U. S. A., New London, Conn., until 3 p. m., Dec. 21, for dredging in New Haven Harbor.

BARGE CANAL.—Albany, N. Y.—Bids were opened on Nov. 22 by F. C. Stevens, Supt. Pub. Wks., on three Barge Canal contracts, as follows: Contract No. 27-A—Champlain Canal, Section 2—for completing the construction of the canal, together with all incidental work between Stations 1046 + 16, the south end of Contract No. 25 at Dunham's Basin Road, and the Hudson River at Fort Edward, Station 1245; length, 3.76 miles. Contract No. 37—Oswego Canal, Section 1—for improving the Oswego canal between Fulton and Oswego; length, 9.73 miles. Contract No. 82—Erie Canal, Section 9—for constructing new highway bridge superstructures over the Erie canal between the Genesee River and the east end of Contract No. 6 within the limits of Contract No. 21. The bids reveived were: Contract No. 27-A—Holler & Shepard, Ellwanger and Barry Bldg., Rochester, N. Y., $449,499; engineer's estimate, $409,455. Contract No. 37—S. Pearson & Son, Inc., 507 Fifth Ave. New York, $2,479,505; American Pipe & Construction Co., 112 North Broad St., Philadelphia, Pa., $2,323,998; engineer's estimate, $1,992,220. Contract No. 82—Groton Bridge Co., Groton, N. Y., $28,841; M. Fitzgerald, Hoosick Falls, N. Y., $28,974; Lupfer & Remick, Ellicott Square, Buffalo, N. Y., $29,135; engineer's estimate, $27,235.

PAVING BLOCKS.—New York, N. Y.—Bids will be received by Kingsley L. Martin, Comr. of Bridges, until 2 p. m., Dec. 6, for furnishing and delivering wood paving blocks to Third Ave., 145th St. and City Island bridges.

COPING, FENCE.—New York, N. Y.—Bids will be received by the Park Board until 3 p. m., Dec. 8, for all labor and materials required for setting new bluestone coping and resetting old bluestone coping on a concrete foundation and erecting and completing brass rail fence in Borough Hall Park, Boro. Brooklyn, together with all the work incidental thereto.

PIER.—New York, N. Y.—The contract for the construction of the Gold St. pier has been awarded to E. DE V. TOMPKINS, 81 East 125th St., New York, at $9,145.

REPAIRS TO FERRYBOAT.—New York, N. Y.—The contract for repairs to the ferryboat "Brooklyn" has been awarded by Calvin Tomkins, Comr. of Works, to the COLUMBIA ENGINE WORKS, Imlay and Pioneer Sts., Brooklyn, N. Y.

ROAD ROLLER.—New York, N. Y.—All bids opened by the Park Board on Nov. 17 for furnishing to the Department of Parks a 15-ton steam roller have been rejected.

BROKEN STONE.—New York, N. Y.—Contract for furnishing broken stone to the Borough of Richmond, bids opened on Nov. 15, has not been awarded. Bids will be readvertised. George Cromwell is Boro. Pres.

MOVING PAVING STONE.—New York, N. Y.—Bids are asked until 2.30 p. m., Dec. 2, by the Department of Public Charities for furnishing all the labor and appliances required for moving 7,000 sq. yds. of paving stone from the Williamsburg Bridge, at Willett St., to Randall's Island. Michael T. Drummond is Comr.

REPAIRS TO FERRYBOAT.—New York, N. Y.—Bids will be received by Calvin Tomkins, Comr. of Docks, until noon, Dec. 2, for Contract No. 1256, for furnishing all the labor and materials required for repairs to the municipal ferryboat "Richmond."

RETAINING WALL.—New York, N. Y.—Bids will be received by George Cromwell, Pres. Boro. of Richmond, until noon, Dec. 6, for furnishing all the labor and materials required for completing unfinished retaining wall and appurtenances on Jay St., being part of the street improvements authorized for the approaches to the St. George Ferry, Boro. Richmond.

ASPHALT TRUCKS, ROLLERS, ETC.—New York, N. Y.—Bids are asked by Alfred E. Steers, Pres. Boro. Brooklyn, until 11 a. m., Nov. 30, for furnishing and delivering eight asphalt trucks, to be delivered at the yard of the Bureau of Highways, on the north side of Seventh St. Basin, Gowanus Canal, and for furnishing and delivering two steam asphalt rollers and four fire wagons, to be delivered at the municipal asphalt plant, situated near Sixth St. and Second Ave., Boro. Brooklyn.

LOCKERS.—New York, N. Y.—Bids will be received by the Board of Trustees of the College of the City of New York at 17 Lexington Ave., until noon, Nov. 30, for furnishing and delivering 264 metal clothes lockers and various swimming pool and gymnasium apparatus.

SUBDRAINAGE TUNNEL.—New York, N. Y.—Bids will be received by the Board of Trustees of the College of the City of New York at 17 Lexington Ave., until noon, Nov. 30, for the work of excavating a subdrainage tunnel from Amsterdam Ave. underneath the grounds along the line of 139th St. and across St. Nicholas Park to a connection with the sewer in St. Nicholas Ave., Boro. Manhattan.

TUNNEL.—New York, N. Y.—The contract has been awarded to the JOHN PIERCE CO. for constructing the Gowanus Canal flushing tunnel at $715,471.

SEAWALL.—New York, N. Y.—Bids are asked until 3 p. m., Dec. 5, by C. B. J. Snyder, Supt. School Bldgs., Dept. of Education, for the general construction, etc., of a concrete seawall at the athletic field on Munson and Orchard Sts. and the East River front, Astoria, Long Island City, Boro. Queens.

GRAVEL, SAND, ETC.—New York, N. Y.—Bids will be received by George McAneny, Pres. Boro. Manhattan, until 2 p. m., Dec. 5, for furnishing and delivering 1,000 cu. yds. of washed gravel and 1,500 cu. yds. of sand; also 200 ends of pine wood.

DREDGING.—New York, N. Y.—Bids will be received by Alfred E. Steers, Pres. Boro. Brooklyn, until 11 a. m., Dec. 7, for dredging Newtown Creek Canal at and in the canal and basin included within the boundaries of Johnson Ave., Montrose Ave., Morgan Ave., Varick Ave., and also in the Stagg St. basin.

SHELTERS.—New York, N. Y.—Bids were received on Nov. 10 by Kingsley L. Martin, Comr. of Bridges, for the construction of shelters on the Harlem River bridges and on the Vernon Ave. Bridge. Both contracts have been awarded to CHARLES MEAD & CO., 299 Broadway, at $14,120 and $4,614, respectively.

*DREDGING.—New York, N. Y.—Bids will be received by Col. W. M. Black, Corps Engrs., U. S. A., Army Bldg., New York, until noon, Dec. 19, for dredging and rock removal in Bronx River and in East Chester Creek.

FIRE APPARATUS.—New York, N. Y.—Bids will be received until 11 a. m., Dec. 5, by M. Gray Zalinski, Deputy Q. M. General, U. S. A., for furnishing fire apparatus.

WALL.—New York, N. Y.—Plans have been filed for the construction of a stone and brick wall at Riverside Drive and 149th St., for the A. Feltman Construction Co. Estimated cost, $25,000. George & Edward Blum are Archs., 505 Fifth Ave.

PIERS—New York, N. Y.—The Sinking Fund Commission is considering plans of Calvin Tompkins, Comr. of Docks, for a system of municipal piers along the South Brooklyn water front. The plans provide for seven piers between 53d and 63d Sts., all to be 1,200 ft. in length, four to be 150 ft. wide and two 125 ft. The pier at the foot of 63d St. will be 60 ft. wide.

TRI-BOROUGH SUBWAY.—New York, N. Y.—See item under Electric Railways.

MOORING CHAIN.—Fort Totten, N. Y.—Bids are asked until 10 a. m., Nov. 28, by the Commanding Officer, Torpedo Depot, Fort Totten, for furnishing 95,200 ft. of mooring chain, 2,500 lbs. of proof test, and 5,000 lbs. breaking strain.

BELL BUOYS, ETC.—Tompkinsville, N. Y.—Bids have been opened by Capt. R. M. Doyle, U. S. A., Inspector Third Lighthouse Dist., Tompkinsville, for bell buoys and appendages for the Third District. Contracts have been awarded as follows: Bell buoys, to P. DELANEY & CO., Newburgh, N. Y., at $11,873; gas buoys, to the SAFETY CAR & LIGHTING CO., at $44,700.

DREDGE WORK.—Waterford, N. Y.—Bids will be received by Shanley-Morrissey, Inc., Mechanicsville, N. Y., for about 200,000 cu. yds. of dredge work, located on the lower end of Champlain Canal, Contract 70, Waterford.

PIER.—Jersey City, N. J.—The contract for the construction of an open pier for the Central R. R. of New Jersey at its Jersey City terminal has been awarded, it is reported, to GEORGE B. SPEARIN, Fanwood, N. J. The pier will be 133 ft. wide and 800 ft. long. Estimated cost, $73,000.

STEEL CAR FLOATS, ETC.—Hoboken, N. J.—The Delaware, Lackawanna & Western R. R. Co. is in the market for six steel car floats and one harbor tug. The steel floats are to replace an equal number of condemned wooden floats. The cost of the steel floats will be between $55,000 and $65,000 each. The cost of the harbor tug is approximately $75,000. The total expenditure for this new equipment will be between $400,000 and $500,000.

TROLLEY SYSTEM.—Frankford, Pa.—Bids are asked until 10 a. m., Nov. 25 by the Commanding Officer, Frankford Arsenal, Frankford, for furnishing and erecting one trolley system at Frankford Arsenal.

*WOODEN PIER.—Annapolis, Md.—Bids were received by the Navy Department, Washington, D. C., on Nov. 12, for constructing a wooden pier at the U. S. Naval Academy, Annapolis, as follows: (a) work complete, (b) amount to be deducted if Government funrishes c.-i. bollard, cleats and bitts: Sanford & Brooks Co., 24 Commerce St., Baltimore, Md., (a) $29,500, (b) $750; Nael Construction Co., Baltimore, (a) $38,300, (b) $800; Andrew Miller Co., Dundalk, Md., (a) $36,118, (b) $1,100; American Paving & Construction Co., 211 South Ninth St., Philadelphia, Pa., (a) $36,484, (b) $1,200; Latta & Terry Construction Co., 1319 Pennsylvania Bldg., Philadelphia, Pa., (a) $34,900, (b) $1,500; William P. McDonald, Mt. Vernon, N. Y., (a) $32,777, (b) $600; William L. Miller, 19 Milk St., Boston, Mass., (a) $23,743, (b) $1,200; McLean Contracting Co., 902 Maryland Trust Bldg., Baltimore, (a) $37,500, (b) $1,000.

DOCK IMPROVEMENT.—Baltimore, Md.—The $2,000,000 dock loan for improvements to be made in the city has been passed and the money is now available. O. F. Lackey, Harbor Engr., has announced that the first pier to be erected will be the commercial and recreation structure at the foot of Broadway. The new pier will be 500 ft. long and 150 ft. wide. It will be a double deck fireproof structure resting on concrete piles and will cost about $250,000. The first or street level surface will be used for commercial purposes and will be divided by a street and freight car tracks. The upper deck will be separated by concrete floor, which will be part of a veranda to surround the entire structure. The piles on which the pier will rest will be similar to those used in other dock improvements by the Raymond Concrete Pile Co. Noted on Nov. 17.

STEEL TUBING, ETC.—Washington, D. C.—Bids will be received by the Bureau of Yards and Docks, Navy Dept., Washington, until Nov. 29, for furnishing supplies, as follows: Mare Island Navy Yard, Cal., Schedule 3048, 2,500 ft. steel tubing twelve motor end drills; Newport, R. I., Schedule 3051, two turbine generator sets and two motor generator sets. Applications for proposals should designate the schedules desired by number.

CANNON.—Washington, D. C.—Bids are asked until noon, Nov. 30, by the Bureau of Ordnance, Navy Dept., Washington, for furnishing ten 14-in. nickel steel, breech-loading, rifled cannon, with spare parts and accessories. N. E. Mason is Ch. Bureau.

HOSE.—Washington, D. C.—The following bids were received by the Commissioners of the District of Columbia, on Nov. 15, for furnishing during the remaining portion of the fiscal year ending June 30, 1911, about 15,000 ft. of 2½-in. cotton covered, rubber-lined hose for use in the fire and other departments of the District of Columbia: Eureka Fire Hose Mfg. Co., 13 Barclay St., New York, $1.10 per lin. ft.; Revere Rubber Co., New York, $1.15 per lin. ft.; Gutta Percha & Rubber Mfg. Co., 126 Duane St., New York, $1.10.

SEAWALL.—Norfolk, Va.—Bids were received by the Bureau of Yards and Docks, Navy Dept., Washington, D. C., on Nov. 19, for a seawall at the U. S. navy yard, Norfolk, as follows: Alsop & Peirce, First National Bank Bldg., Newport News, Va., item (1) $109,333, (2) $15,600, (3) $233, (4) $15,450, (5) $3,800, (6) $373, (7) $6, (8) $396; William L. Miller, 19 Milk St., Boston, Mass., (1) $104,945, (2) $15,900, (5) $1,234, (6) $166; Sanford & Brooks Co., 24 Commerce St., Baltimore, Md., (1) $115,500, (2) $17,000, (3) $234, (4) $17,000, (5) $1,300, (6) $144, (7) $2, (8) $156; Richardson Construction Co., Inc., 404 Seaboard Bank Bldg., Norfolk, (1) $105,347 and $105,347, (2) $16,535, (3) $276, (4) $19,140, (5) $2,314, (6) $231, (7) $4, (8) $255.

*LOCK GATES, ETC.—Wheeling, W. Va.—Bids will be received until 11 a. m., Dec. 22, by Capt. F. W. Altstaetter, Corps Engrs., U. S. A., Wheeling, for furnishing and erecting steel lock gates, and furnishing and delivering Poiree-dam trestles, gate recess covers and tank-pit covers for Dam 26, Ohio River.

*LEAVES FOR WEIRS.—Wheeling, W. Va.—Bids are asked by Capt. F. W. Altstaetter, Corps Engrs., U. S. A., until 11 a. m., Dec. 19, for furnishing and erecting leaves for two bear trap weirs of Dam 26, Ohio River.

SUBWAY.—Savannah, Ga.—Bids will be received until noon, Dec. 5, by a Special Committee of the City Council, for the Henry St. subway under the Atlantic Coast Line R. R. The work will consist mainly of following quantities: 5,600 cu. yds. of earth excavation, 6,150 lin. ft. piles in place, 800 cu. yds. concrete in place, 700 sq. yds. sidewalks, 280 lin. ft. sidewalk hand railing.

QUAY WALL.—Key West, Fla.—Bids will be received until Dec. 22 by the Bureau of Yards and Docks, Navy Depart., Washington, D. C., for a quay wall at the Naval Station, Key West, as per specification No. 1758. An appropriation of $135,000 is available. R. C. Hollyday is Ch. of Bureau.

*SAND AND GRAVEL.—Montgomery, Ala.—Bids are asked until 2 p. m., Dec. 21, by Maj. J. B. Cavanaugh, Corps Engrs. U. S. A., Montgomery, for sand and gravel.

DREDGING.—Mobile, Ala.—The contract for dredging the Alabama River and Mobile Bay channels to the depth of 27 ft. has been let to the ATLANTIC, GULF & PACIFIC CO., 13 Park Row, New York. The contract amounts to $250,000.

LEVEE.—New Orleans, La.—Contract was not awarded on Nov. 3 for 10,000 cu. yds. of levee work for the Vic Adena to Prospen Gagnes Levee in the Dike Borgne Basin Levee District. New bids will probably be asked for. G. W. Lawes is Secy. Bd. State Engrs., New Orleans.

DOCKS.—Paducah, Ky.—The Ayeer & Lord Tile Co. will construct docks here to cost about $15,000. H. Baker is Mgr.

STREET SIGNS.—Louisville, Ky.—Bids will be received Nov. 28 by the Board of Public Works for furnishing and erecting street signs at 1,900 intersections throughout the city. Caldwell Norton is Chm.

OIL CARRIERS.—Cleveland, Ohio.—The AMERICAN SHIPBUILDING CO, Cleveland, Ohio, have been awarded contracts for building two new oil carriers for the Standard Oil Co. Contracts call for a steamer and barge of about the same size, 260 ft. long by 43 beam and 23 ft. deep, with a capacity of 1,800,000 gallons. Both boats will be built in the Cleveland yards and be ready early in 1911.

PIPE BOARDS.—Toronto, Ohio.—The J. O. GOODLIN SON & CO., have been awarded the contract by the Union Clay Mfg. Co., Empire, Ohio, for 12,000 pipe boards to be used in making clay products.

*HULLS, FLATBOATS, ETC.—Cincinnati, Ohio.—Bids were received as follows by Maj. John C. Oakes, Corps, Engrs., U. S. A., on Nov. 15, for two manoeuvre boat hulls, three flatboats and two dump scrows: (a) if of long-leaf yellow pine; (b) if of red Oregon fir: Parkersburg Rock Co., Parkerburg, W. Va., (a) $13,677; (b) $13,677; E. J. Howard, Jeffersonville, Ind., (a) $6,873, not including boat hull and two small flatboats; (b) $7,539, not including boat hulls and two small flatboats; Racine Boat Co. (a) for two dump scows only, $2,852.

DRAINAGE WORK.—Cleveland, Ohio.—The City Hall Commission has awarded the contract for drainage work at the new city hall site to HOAG & ZULLO at $25,800.

CASTINGS.—Portsmouth, Ohio.—A contract has been awarded to the PORTSMOUTH MACHINE & CASTING CO., Portsmouth, for 1,300 tons of castings.

BUILDING CITY.—Indianapolis, Ind.—The Greater Indianapolis Industrial Association has been incorporated to build a new industrial city on a 1,000-acre site adjoining this city. A power plant will be constructed and manufacturing plants solicited. C. A. Bookwaller, Henry Jameson, Winfield Miller, all of Indianapolis, and others, are directors.

LUMBER.—Jeffersonville, Ind.—Bids will be received by Maj. Joseph T. Davidson, Dept. Q. M., U. S. A., Jeffersonville, until Nov. 26, for furnishing 15,000 ft. of white oak and 12,000 ft. of yellow poplar.

*REPAIRS TO CANAL WALLS.—Detroit, Mich.—Bids were received as follows by Col. C. McD. Townsend, Corps Engrs., U. S. A., on Nov. 15, for repairs to canal walls at Sault Ste. Marie, Mich. Great Lakes Bridge & Dock Co., Chicago, Ill., $35,760; Moffatt, McKechnie & Co., Sault Ste. Marie, Mich., $38,648; The H. E. Talbott Co., Dayton, Ohio, $42,075; MacArthur Bros. Co., 11 Pine St., New York, $42,072; Tobin P. Conrick, Sault Ste. Marie, Mich., $42,938; Ralph E. Newton, Milwaukee, Wis., $45,730. The work includes 3,200 cu. yds. of Class "A" excavation; 550 cu. yds. Class "B" excavation; 1,500 cu. yds. of backfilling, 4,040 cu. yds. of concrete in place, and 5,000 bbls. of cement.

*PIER WORK.—Detroit, Mich.—Bids will be received until 3 p. m., Dec. 22, by Col. C. McD. Townsend, Corps Engrs., U. S. A., Detroit, for removal of old superstructure and building concrete superstructure on north pier and on pier-head of south pier at harbor of refuge, Harbor Beach, Mich.

DRAINAGE DITCH.—Morrisonville, Ill.—The Commissioners of Drainage District No. 1, Morrisonville, have awarded a contract to KLENTCHY DRAINAGE CO., Cairo, Ill., for a drainage ditch in Christian County. The pipe consists of 12,925 lin. ft. of open ditch 25,705 cu. yds., 575 ft. 27-in. pipe, 5,600 ft. of 24-in. pipe, 4,225 ft. of 20-in. pipe, 4,550 ft. of 18-in. pipe, 370 ft. of 15-in., 9,135 ft. of 14-in., 10,100 ft. of 12-in., 18,250 ft. of 10-in., 2,940 ft. of 8-in., six concrete retaining walls, 30 cu. yds. total trench excavating. J. Dappert, Taylorville, is Engr.

PARKS, ETC.—Chicago, Ill.—The citizens on Nov. 8 voted in favor of issuing bonds for the following: $7,000,000 for acquiring about 30,000 acres of woodland in Cook County, to be maintained as a large natural park belt around the city; $1,000,000 for the West Park Board, to be spent in building small parks in the congested districts.

DRAINAGE DITCH.—Blairsburg, Iowa.—JOE FARDAL, Jewell, Iowa, has been awarded the contract for the Hamilton County drainage ditch in Blairsburg, known as the Marvel District, at $21,000.

DITCH.—Carroll, Iowa.—Peter Stephany, County Audr., will receive bids until noon, Dec. 6, for the construction of ditch No. 61 in Greene County and No. 41 in Carroll County, approximating 4,700 ft. of 16 to 24-in. vitrified salt glazed clay drain tile and 16,850 ft. of 8 to 12-in. hard burned clay drain tile. Bids will also be received for excavating 21,900 lin. ft. of trenches and the construction of a retaining wall and apron of concrete.

DITCHES.—Crookston, Minn.—Bids were received by H. J. Welte, County Audr., Polk County, on Nov. 12, for the construction of Ditch No. 83, consisting of 22,671 yds. of excavation, and Ditch No. 84, 38,910 yds. of excavation. Contracts have been awarded as follows: No. 83, to KNUT LANDSOERK, McIntosh, Minn., and CHRIST VOLEN, Erskine, Minn.; No. 84, to JACOB BJONTEGARD, Fosston, Minn.

LOCOMOTIVE, ETC.—Fort Leavenworth, Kan.—Bids are asked until 11 a. m., Dec. 5, by Capt. J. E. Normoyle, Q. M., U. S. A., for furnishing and delivering f. o. b. Terminal R. R., Fort Leavenworth, one 40 to 50-ton standard gage locomotive, two standard gage air brake and dump cars; also two standard gage flat cars.

DIKE.—Topeka, Kan.—The County Commissioners on Nov. 14 awarded the contract to HASKINS & RAMSEY, Topeka, for constructing the south side dike at $103,545. Other bidders were: Spencer & Keesee, Topeka, $115,576; S. Dolman & Son, Topeka, that part of the dike west of the Rock Island bridge only, $29,714; Jones Bros., Leavenworth, $110,534; J. B. Betts, Topeka, $121,944; H. S. Moore, Denver, $129,056; Luttjohann & Folks, Topeka, $125,512; William P. Carmichael Co., Kansas City, $113,780; Callahan Bros., Denver, $134,978.

PIER.—Port Arthur, Tex.—Bids will be asked soon for the construction of a pleasure pier here. G. N. Bliss, Port Arthur, is interested.

LUMBER.—Seattle, Wash.—Bids will be received by E. C. Long, Q. M., U. S. A., 322 Arcade Annex, Seattle, until 11 a. m., Dec. 9, for furnishing and delivering at Seattle or Tacoma, Wash., or other Puget Sound ports, Portland, Ore., San Francisco, Cal., or other Pacific coast ports, accessible to vessels of deep draft, 466,701 ft. of lumber required by the Quartermaster's Department at Manila, P. I.

WHARF, STOREHOUSE, ETC.—Fort Ward, Wash.—The contract for the construction of a wharf, storehouse, boat houses, etc., at Fort Ward has been awarded to the INTERNATIONAL CONSTRUCTION CO., Seattle, Wash., at $11,510.

DOCK PLANS.—Tacoma, Wash.—The Department of Public Works will receive competitive plans for the design of a municipal dock until Dec. 1. Bonds for $405,000 have been voted. A building 300 ft. long and four stories high will be erected on the dock at an estimated cost of $120,000.

LOCKS.—Oregon City, Ore.—Government engineers have completed surveys for the construction of new locks here.

HULL OF DREDGE.—Portland, Ore.—The Star Sand Co. has let the contract to the PORTLAND SHIPBUILDING CO. for building the hull of a $50,000 dredge.

FABRICATED STEEL, RIVETS.—Los Angeles, Cal.—Bids will be received until Dec. 23 by the Board of Public Works for furnishing all fabricated steel and rivets necessary to construct 1,409 ft. of riveted steel siphon 9 ft. 6 ins. in diameter. H. B. Ferris, is Secy.

FIRE APPARATUS.—Los Angeles, Cal.—Bids will be received until Dec. 6 by the City Council for the following fire apparatus: A motor-propelled automatic aerial hook and ladder truck; motor propelled combination hose wagon and chemical engine; motor propelled city service hook and ladder truck; 6-cycle 80 HP. motor; 4-cycle 50 HP. motor and chassis for a combination chemical and hose wagon.

DREDGING.—Los Angeles, Cal.—One bid was received on Nov. 14 by the Board of Public Works for dredging 27,000 cu. yds. of earth in Wilmington Basin. The bid was from the North American Dredging Co. of Nevada, who offered to rent its dredge to the city at $300 per day, the dredge to be operated and all labor supplied by the company.

WHARF.—Los Angeles, Cal.—The following bids have been opened by the Board of Public Works for the construction of a municipal wharf in Wilmington Basin, Los Angeles Harbor: Purcell, Giddings & Mann, $8,312; riprap $4.93 per cu. yd.; Charles W. Carbaley, $9,434; riprap $3.25; G. M. Atkins, $15,936; riprap $3.40; Mercereau Bridge & Construction Co., $17,900; riprap $3.04.

BREAKWATER.—Los Angeles, Cal.—Bids will be received until Dec. 1 by Capt. W. P. Stokey, Corps Engrs., U. S. A., Central Bldg., Los Angeles, for finishing the Government breakwater at San Pedro. A 1,900-ft. gap is to be filled with rock. Estimated cost, about $225,000. About 160,000 tons of rock will be required.

LEVEE IMPROVEMENTS.—Colusa, Cal.—The contract for levee improvements in Reclamation District No. 108 has been awarded to HENNIGAN BROS., Woodland, Cal., at 10 cts. per cu. yd. and W. T. WILKINS, College City, Cal., at 12 cts. per cu. yd. Estimated quantity of earth 300,000 cu. yds. J. W. Kaerth is Engr., Colusa.

STREET FLUSHING MACHINE.—Vallejo, Cal.—Bids will be received by the Board of Public Works until 7.30 p. m., Dec. 5, for furnishing a street flushing machine to the city.

DREDGING.—Oakland, Cal.—Bids have been opened by Brig.-Gen. Chas. E. L. B. Davis, U. S. A., 726 Chronicle Bldg., San Francisco, for dredging in Oakland Harbor, about 1,289,200 cu. yds. The bids follow: Standard American Dredging Co., Merchants' Exchange Bldg., San Francisco, 12.9 cts, per cu. yd.; San Francisco Bridge Co., Monadnock Bldg., San Francisco, 11.4 cts; total cost, $146,969 (recommended for award); N. R. Harris, 95 Market St., San Francisco, 11.94 cts.

TUNNEL.—Oroville, Cal.—The Great Western Power Co., H. H. Sinclair, Gen. Mgr., Shrone Bldg., San Francisco, will construct a 4-mile tunnel in connection with its power development from Big Bend.

ICE-MAKING MACHINES.—Phoenix, Ariz.—The Peoples' Ice & Fuel Co. has awarded contract for a 60-ton daily capacity ice-making machine, weighing 300,000 lbs. and costing $50,000, to the YORK MFG. CO., York, Pa.

STAMP MILL, CYANIDE PLANT.—Kingman, Ariz.—The YOUNG CONSTRUCTION CO., Union Trust Bldg., Los Angeles, Cal., has been awarded a contract for the erection of a 50-ton stamp mill and cyanide plant at Kingman for the Ruth Mine Co. The construction will be heavy timber frame, corrugated iron roof, concrete foundation. Estimated cost, $50,000.

BREAKWATERS, ETC.—Ottawa, Ont.—Contracts have been awarded by the Department of Public Works, Ottawa, R. C. Desrochers, Secy., as follows for breakwaters and other improvements: Breakwater, New Edinburg, N. S., to J. E. BIGELOW & H. BIGELOW, at $11,900; breakwater, Goderick, Ont., to MICHAEL CONNOLLY, 91 Crescent St., Montreal, Que., at $40,417; wharf and retaining walls, Hamilton, Ont., to JOSEPH BATTLE, Thorold, Ont., at $60,844; wharf, Lakeport, Ont., to SAMUEL GOWAN, Brockville, Ont., at $16,430; wharf, Bic, Que., to THEOPHILE BEAUMONT, St. Thomas de Montmagny, Que., at $33,810.

CHAPEL COVE, N. S.—R. C. Desrochers, Secy. Dept. Pub. Wks., Ottawa, Ont., will receive bids until noon, Dec. 5, for the construction of a breakwater here.

SPRUCE BOOMS, PROPS, ETC.—Maccan, N. S., Can.—The Maritime Coal, Ry. & Power Co. will receive bids for the following delivered at Jiggin's Mills, N. S.: 2,000 spruce booms, 13 ft. long and 8 ins. in diameter at small ends; 25,000 6-ft. spruce props, 6 ins. at small end; 200,000 pieces of 4-ft. butt timber of spruce, fir, pine or hemlock; 2,000 hemlock or jack pine railroad sleepers 8-ft. long. Further particulars can be obtained from David Mitchell.

PUBLIC BATHS.—Winnipeg, Man., Can.—M. Peterson, Secy. Bd. of Control, will receive bids until 11 a. m., Nov. 30, for the erection of public baths here from plans prepared by William Bruce, Arch., Winnipeg.

SUBWAY.—Regina, Sask.—L. A. Thornton, City Engr., is preparing plans for the construction of the subway to be built here. It will be 910 ft. long and the bridge portion will be 440 ft. long, providing for 19 tracks. The plans will be submitted to the Board of Railway Commissioners for their approval. The Board has apportioned the cost of the work as follows: The city to bear the cost of the excavation, retaining walls, abutments, pavement and drainage, and the Canadian Pacific Ry. Co. to bear the cost of the superstructure and temporary track supports while the work is in hand. The Board has fixed one year for the com[illegible] of the work. No definite arrangem[illegible] can be made as to contracts until the [illegible] are approved.

STEAMERS.—Victoria, B. C[illegible] Canadian Northern Pacific Fisher[illegible], controlled by Mackenzie & Mann, [illegible] Ont., will build five whaling steamer[illegible] the present winter. The company [illegible] alized at $2,500,000.

CABLE.—Vancouver, B. C.—[illegible] British Columbia Telephone Co. has [illegible] the following contracts: For 250,000 [illegible] cable, to the WIRE & CABLE CO., Mon[illegible] Que., average size of 200 wires per [illegible] to the NORTHERN ELECTRIC CO., M[illegible] for 52 switchboards and 3,000 teleph[illegible] instruments. These materials will co[illegible] approximately $500,000.

CONTRACT PRICES.

(* *Denotes that this work is adv[illegible]ed in Engineering News.*)

GRADING.—Seattle, Wash.—Bids [illegible] re received Oct. 14 by the city, R. H. [illegible] omson, City Engr., for the grading of R[illegible] Ave., from 57th Ave. to Ryan St., [illegible] (A) Sloane Bros.; (B) AND. PETERS[illegible] & CO. (awarded contract). The itemized [illegible] were as follows:

GRADING, SEATTLE, WAS[illegible]

	A	B
Abstract of title, fixed estimate	$2,000.00	[illegible]000.00
8.5 acres clearing and grubbing	200.00	200.00
74,500 cu. yds. earthwork	.43	.39
36 M. ft. B. M. lumber culvert	22.00	22.00
1,000 lbs. culvert, iron	.07	.08
4 M. ft. B. M. Box drains	22.00	22.00
200 lin. ft. 18-in. sewer pipe	4.00	4.00
50 lin. ft. 24-in. sewer pipe	5.00	5.00
50 lin. ft. sub-drains (shallow type)	1.00	.75
Totals	$37,785	$34,803

BRIDGE.—Syracuse, N. Y.—Bids were received Nov. 10 by F. C. Stevens, Supt. Public Works for the construction of a lift bridge over the Erie Canal at Franklin St., Syracuse. The itemized list in the accompanying table is from the following: (A) Engineer's estimate: (B) Lupfer & Remick, Ellicott Sq., Buffalo, N. Y.; (C) STEEL STORAGE & ELEVATOR CONSTRUCTION CO. Buffalo, N. Y. (awarded contract); (D) Raymond Kelton, 100 State St., Albany, N. Y.; (E) W. J. Burns Co., Syracuse, N. Y.:

BRIDGE, SYRACUSE, N. Y.

	A	B	C	D	E
1,700 cu. yds. excavation	$1.00	$1.30	$0.90	$1.22	$1.00
720 cu. yds. embankment	.20	.30	.20	.30	.20
5 cu. yds. lining	1.50	1.50	1.50	.75	1.50
50 cu. yds. puddle	2.00	2.00	2.00	1.50	2.00
990 cu. yds. second-class concrete	10.00	10.50	9.00	10.40	11.00
2,100 sq. ft. Portland cement walks	.20	.20	.15	.20	.20
100 lin. ft. curb stones	1.50	1.50	1.50	1.40	1.50
83 lin. ft. stone headers	.75	.75	.75	.75	.75
2,300 lbs. c.-i. pipe and specials	.035	.035	.035	.04	.035
28,000 lbs. pig iron	.0125	.0125	.01	.0125	.0125
49,000 lbs. metal reinforcement	.035	.04	.03	.04	.035
250,000 lbs. structural steel	.057	.05	.047	.0575	.057
23,700 lbs. machinery	.15	.15	.12	.15	.15
370 sq. yds. wood block paving	3.00	3.00	3.00	3.50	3.00
3 M. ft. lumber	55.00	55.00	55.00	60.00	55.00
7.5 M. ft. creosoted lumber	75.00	75.00	75.00	75.00	75.00
225 lin. ft. scroll railing	5.00	5.00	5.00	5.40	5.00
Electric equipment (lump sum)	1,600.00	2,000.00	1,500.00	2,000.00	1,900.00
Operators' cabin (lump sum)	500.00	1,000.00	500.00	875.00	600.00
Safety gates (lump sum)	500.00	500.00	500.00	525.00	600.00
Track work (lump sum)	660.00	660.00	660.00	690.00	700.00
Railroad signals (lump sum)	1,500.00	2,000.00	1,500.00	2,500.00	1,800.00
Maintaining traffic (lump sum)	2,500.00	3,000.00	2,500.00	3,000.00	3,000.00
Removing railroad bridge (lump sum)	500.00	500.00	500.00	575.00	600.00
Totals	$43,132	$44,609	$38,245	$46,963	$45,577

WATER-WORKS.—Bell Fourche, S. Dak.—Bids were opened Nov. 14 by the City Council of Belle Fourche for the proposed water-works. Estimates were received from: (A) L. W. Schruth, Fargo, N. Dak.; (B) Williams Construction Co., Belle Fourche, S. Dak.; (C) Wm. Gaward Co., Sheridan, Wyo.; (D) Wilson Kenny Co., Deadwood, S. Dak.; (E) KATZ-CRAIG CONTRACTING CO., Omaha, Neb. (awarded contract); (F) B. W. Goiens, Sturgis, S. Dak.; (G) Bartlett & Co., Deadwood, S. Dak. The itemized bids were as follows; Samuel H. Lea is Engr.-in-Charge:

WATER-WORKS, BELLE FOURCHE, S. DAK.

	A	B	C	D	E	F	G
30,000 gallon reinforced concrete reservoir	$1,200.00	$1,164.50	$2,250.00	$1,472.00	$1,600.00	$2,235.00	$1,256.00
200,000 gallon reinforced concrete reservoir	4,000.00	3,925.00	5,550.00	7,480.00	5,900.00	4,763.00	6,260.00
Pumping station	1,500.00	1,250.00	1,700.00	1,325.00	1,350.00	985.00	1,325.00
Air compressor	650.00	550.00	750.00	988.00	500.00	600.00	674.00
Air receiver	160.00	210.00	135.00	167.50	100.00	140.00	135.00
Air lines to wells	250.00	480.00	450.00	526.00	500.00	150.00	485.00
20 HP. motor for compressor	600.00	475.00	690.00	612.00	400.00	700.00	496.00
Triplex power pump with motor	1,400.00	1,150.00	1,250.00	1,500.00	850.00	550.00	884.00
Wiring, switches, lighting circuit, etc.	200.00	125.00	250.00	98.00	100.00	100.00	75.00
1,950 lin. ft. 10-in. c.-i. pipe	1.77	1.78	2.00	2.17½	1.55	1.85	1.90
1,720 lin. ft. 8-in. c.-i. pipe	1.37	1.44	1.60	1.76	1.30	1.45	1.55
11,530 lin. ft. 6-in. c.-i. pipe	1.15	1.28	1.30	1.39	1.00	1.05	1.20
3,615 lin. ft. 4-in. c.-i. pipe	.92	1.06	.98	1.03	.80	.82	.95
8-in. cut off valve	30.00	27.50	40.00	48.00	25.00	30.00	45.00
6-in. cut off valve	21.00	20.50	30.00	39.25	20.00	20.00	34.20
12 hydrants	44.00	34.00	50.00	71.00	35.00	36.[illegible]	63.30
Special castings, per lb	.04	.08	.075	.07	.04	[illegible]	.07
Extra excavation, per cu. yd	.50	.30	2.00	.65	1.00	.65	.60
Sand, per cu. yd	2.50	1.75	4.50	4.75	2.00	3.0[illegible]	5.00
Concrete, per cu yd	10.00	8.00	17.00	17.10	12.50	15.[illegible]	16.50
Taking up and relaying 570 ft. 6-in. c.-i. pipe	.50	1.25	.50	1.21	.50	1.[illegible]7	1.15
Taking up and relaying 400 ft. 4-in. c.-i. pipe	.50	1.00	.45	1.01	.40	1.00	.95
Totals	$33,468	$35,484	$39,414	$43,277	$31,936	$32,4[illegible]	$37,087

U. S. POSSESSIONS.

BREAKWATER. — Hawaii. — The LORD-YOUNG CONSTRUCTION CO. has been awarded contract by the Government for the construction of the Hilo breakwater at $1.84 per yd. Cost, $200,000.

PAVING MACHINE.—Manila, P. I.—Improved asphalt paving will be tried out as soon as possible. P. G. McDonnell, Chn. Com. on Engineering and Public Works, has presented the question to the Municipal Board and recommended the purchase of a paving machine of the latest improved type.

BUILDING.—Porto Rico.—Bids were received as follows on Nov. 22 by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, for the construction of a post-office at San Juan: J. E. & A. L. Pennock, Land Title Bldg., Philadelphia, $478,000; Conners Bros. Co., Lowell, Mass., $455,000; P. J. Carlin Construction Co., 16 East 23d St., New York, $372,000; Campbell Building Co., Salt Lake City, Utah, $416,400.

INDUSTRIAL NOTES.

WILBUR D. LOCKWOOD has recently opened an office as engineer and surveyor in the Flatiron Bldg., Peekskill, N. Y. He wishes to receive catalogs from sellers of engineering and architectural materials.

THE DE LAVAL STEAM TURBINE CO., Trenton, N. J., announces that the Dravo-Doyle Co., representing it in Pittsburg, Philadelphia and Cleveland, will open an office in the Marquette Bldg., Chicago, in charge of Mr. H. S. Budd.

CONSIDERABLE DIFFICULTY is being experienced by railways in the Southwest in securing sufficient water to operate locomotives. The Missouri, Kansas & Texas is experiencing great difficulty in securing water from Hillsboro, Texas North. Nearly all freight trains carry extra tank cars.

THE CLEVELAND STONE CO., Cleveland, Ohio, has purchased the property of the Bedford Quarries Co. of Indiana. These quarries were part of the property turned over by John R. Walsh to the associated banks of Chicago. This has been under consideration for several weeks and, in the stone trade, it is considered a very important transaction.

THE ANNUAL MEETING of the Indiana Engineering Society will be held in Indianapolis Jan. 12 to 14. As at former meetings, a feature of much interest will be the exhibit by manufacturers of machines relating to the engineering profession. Space for exhibition purposes can be secured on application to Chas. Brossman, Sec'y., Union Trust Bldg., Indianapolis, Ind.

A LINE OF ELECTRIC MELTING POTS has been placed on the market by the General Electric Co. for those establishments where means must be afforded for melting lead, solder, etc., in a more convenient way than with devices heated by coal, gas, gasoline, oil, etc., which involve a fire risk in addition to other objections. A shallow cylindrical vessel of cast-iron is placed on top of a heating disk and encased to limit radiation losses, the design being such that the heating unit is accessible. The common stock size has a maximum capacity of 15 lbs. of lead and consumes 200, 400 or 600 watts, according to the temperature desired. In addition to this small size units have been built to order having a capacity of from 700 to 3,500 lbs. of melted lead.

ELECTRIC MOTORS UNDER SEVERE CONDITIONS.—Five years ago motor drives were installed in the fertilizer works of G. Ober & Sons, Baltimore, Md., under a triple combination of sulphuric acid fumes, dust and unskilled operation. The work of grinding bone and phosphate rock in the making of fertilizers produces great quantities of dust which settles everywhere in the plant and covers the machinery thickly. Phosphoric acid is made from phosphate rock by treating with sulphuric acid and the acid fumes permeate the air. The operatives are negroes and "poor whites" of that locality, having only slightest knowledge of machinery and giving it the roughest kind of treatment. It is reported by the Westinghouse Electric & Mfg. Co., who supplied the electrical apparatus, that the motors in this plant are operating as satisfactorily to-day as when installed five years ago. Polyphase induction motors of the squirrel-cage type were adopted because of the absence of sliding contacts and wearing parts, except the bearings.

THE CENSUS RETURNS being sent out by the Census Bureau affords some striking examples regarding the growth of city and country population in the state of Indiana, which, according to the thirteenth census, has a population of 2,700,000, a gain of 7.3% compared with the previous year. It is found that this gain is altogether accounted for in seven counties of the state. The total gain in population was approximately 184,000, and in Allen Co., where is located the city of Fort Wayne, the increase is 16,000; in Lake Co., where the new city of Gary has sprung up, the increase was 45,000; in Marion Co., where Indianapolis is the principal city, the gain was 66,000; an increase of 26,000 was found in the county where South Bend is located, and a similar gain in the county where Terre Haute is located; in Sullivan Co., where there are numerous large villages, the increase in population was only 6,000, but this was an increase of about 30%. In the seven counties the percentage increase compared with the previous census was over 40%. This shows that the rural communities have been steadily declining in numbers.

A PERMANENT TECHNICAL EXHIBITION in Milan, Italy, will be held according to the following report of Consul Charles M. Caughy:

"The building for the permanent technical exhibition in Milan is a somewhat imposing structure, now almost completed. It already contains several exhibits, and offers a good opportunity for American manufacturers to display their goods. Simply renting space, however in which to exhibit wares will by no means suffice. Some active agent must be secured to explain the use of machines, the qualities of wares, etc., and supply visitors with advertising matter printed in Italian. Admission to the exhibition will be free.

"Space in the hall on the ground floor or in the galleries rents for $19.30 per year for 39 ins. square, and in the basement $4.82. The price of space on the ground floor is increased 20% if it can be approached from two sides, 30% if approachable from three sides, and 50% if it is isolated or is on the main passage. Advertising space costs $19.30 a year for 39 ins. square. All exhibits must be accompanied by a detailed description in Italian and in duplicate. All expenses incurred in placing the exhibits must be borne by the exhibitor, or, if preferred, the association will attend to it, charging only the actual sum expended. Exhibits must be delivered free of all charges, and all insurance must be effected by the exhibitor."

RADIATION PYROMETER.—A new type of radiation pyrometer, having several new features, has been designed by Mr. R. P. Brown, and is being marketed by the Brown Instrument Co., 311 Walnut St., Philadelphia. This instrument is of the type having a delicate thermocouple placed at the rear end of a telescope tube so that a concave mirror focuses the rays on the couple which is connected to a milli-voltmeter graduated to read degrees of temperature. The telescope has a fixed focus; formerly with such an instrument the operator could not tell whether the pyrometer was too far from the furnace opening, or heated body, but this design has a finder somewhat like that used on hand cameras so that the tube can be readily pointed. Before, with a fixed focus radia-

LIST OF CONTRACTS PENDING.

Plans and Specifications on File.

The following plans (P.) and Specifications (S.) are on file (for reference only unless otherwise noted) at the office of The Engineering News Publishing Co., 220 Broadway, New York.

Bids close.		Noted in issue of
11-30*	**Diversion channel, Portland, Ore. (S.)**	9-29
12- 1*	**Headgates, Boise, Idaho, (S)**	10-20
12- 1	**Extending breakwater, Los Angeles, Cal (S)**	11- 3
12- 3	**Coal & Ash handling apparatus, Norfolk, Va. (S)**	10-27
12- 3	**Boilers, etc., New Orleans, La. (S)**	10-27
12- 3*	Dredging, Newport, R. I. (S.)	11- 3
12- 3	**Boilers, wiring, etc., Tiburson, Cal.**	11-17
12-10	**Pier, Bremerton, Wash. (S.)**	11-10
12-15*	Diversion work, Klamath Falls, Ore. (S)	10-20
12-22	Quay wall, Key West, Fla. (S.)	11-24
1- 7	Dredging, Hawaii (U. S. Poss.) (S)	10-27

Light, Heat and Power Plants.

Bids close.		Noted in issue of
11-25	Electrical work, etc., New York	11-17
11-25	Electric light plant, Olivet Mich.	11-24
11-28	Heating repairs, etc., New York	11-17
11-28*	**Elec. light, etc., South River, N. J.**	10-27
11-28	**Heating, Boston, Mass.**	11-24
11-28*	**Water power, Marshalltown, Ia.**	11- 3
11-28	**Elec. machinery, San Francisco, Cal.**	11- 3
11-30	Furnishing misc. supplies, N. Y.	11-24
12- 1	Installing gas piping	11-24
12- 1*	Furnishing street lamps, Richmond, Va.	11-24
12- 1*	**Heating and vent. system, New York**	10-20
12- 1	**Elec. elevator equip., New York**	10-20
12- 1	Poles, line supplies, Winnipeg, Man.	11-17
12- 3	Boilers, wiring, etc., Tiburson, Cal.	11-17
12- 3	Boilers, etc., New Orleans, La.	10-27
12- 6	Heating, New York, N. Y.	11-24
12- 7	**Wire and cables, Winnipeg, Man.**	11- 3
12- 8	Furnishing pumping machinery, Denison, Tex.	11-24
12- 9*	Heating, New York	11-17
12-10	Electric light fixtures, Carrington, N. Dak.	11-24
12-12	Furnishing misc. supplies, National Soldiers Home, Va.	11-24
12-12	Franchise, Newport, Cal.	11- 3
12-13	Wiring, Washington, D. C.	11-17
12-15	Motor generator sets, Winnipeg, Man.	11-24
12-19	Building and miscl. supplies, Lexington, Mo.	11-24
12-24	Street lighting, Boston, Mass.	11-17

Bridges.

11-25	Bridge, Indianapolis, Ind.	11-24
11-26	Bridge, San Jose, Cal.	11-24
11-28	**Bridge, Wallachin, B. C.**	11- 3
11-28	**Bridge, Victoria, B. C.**	11-10
11-29	Bridges, Courtland, Va.	11-24
11-30	Bridge work, New York	11-24
11-30	Bridges, Monee, Ill.	11-24
12- 1	Steel work, Celina, Ohio	11-24
12- 1	Steel bridge, Rock Hill, S. C.	11-24
12- 1	Bridge, Shippensburg, Pa.	11-24
12- 1	**Bridge, Montmagny, Que.**	10-27
12- 1	**Bridge, Peoria, Ill.**	11-17
12- 2	**Bridge, Indianapolis, Ind**	11-17
12- 2	Bridge work, New York	11-24
12- 5	Bridge, Rock Island, Ill.	11-24
12- 6	Bridges, San Diego, Cal.	11-24
12- 7	Bridge, Aberdeen, Wash.	11-24
12- 8	Bridges, Shreveport, La.	11-24
12-19	Bridge, Jeffersonville, Ohio	11-24
12-20	**Bridge, Norwalk, Conn.**	11-17
12-21*	Fender piers, Beaufort, N. C.	11-24
1- 5	Bridge, Edwardsport, Ind.	11-24

Buildings.

11-28	**Public building, Nelson, B. C.**	11-17
11-28	**Public building, Nanaimo, B. C.**	11-17
11-28	**Warehouse addition, Philadelphia, Pa**	11-17
11-28	**Office building, Mt. Carmel, Pa**	11-17
11-28	School, New York, N. Y.	11-17
11-28	**Building, St. Paul, Minn.**	11-10
11-28	Bargain house, Baltimore, Md.	11-24
11-30	Printing establishment, Baltimore, Md.	11-24
11-30	Office building, etc., Baltimore, Md.	11-24
11-30	Dormitory, New York	11-24
11-30	**Building, Phila., Pa.**	9-29
11-30	**Building decorating, Indianapolis, Ind.**	11- 3
11-30	Barracks, Fort Winfield Scott, Cal.	11-17
12- 1	**Post-office, New York, N. Y.**	10-20
12- 1	**School, Portland, Ore.**	10-27
12- 1	Jail, etc., Troy, N. Y.	11-10
2- 1	Church, Portland, Ind.	11-24
12- 3*	**High schools, Toledo, Ohio**	10-27
12- 5*	**Post-office, Santa Cruz, Cal.**	11- 3
12- 5	Courthouse, Sacramento, Cal.	11-17
12- 6	Masonic buildings, Elizabethtown, Pa.	11-24
12- 7	High school, San Francisco, Cal.	11-24
12- 7	Library building, Columbus, O.	11-24
12- 7	**Armory, Pomeroy, Ohio**	11-17
12- 7	**Post office, etc., Ellsworth, Me.**	11- 3
12- 8*	**Post-office, Granite City, Ill.**	11- 3
12- 8	Post-office, Carbondale, Pa.	11- 3
12-14*	Post-office, Lead, S. Dak.	11-10
12-15*	Repair shop, Fort Monroe, Va. (Mfg. Pl.)	11-17
12-15*	**Changes at post-office, etc., Montgomery, Ala.**	11-17
12-15*	**Prison, Wingdale, N. Y.**	11-17
12-15*	Ice plant, etc., Fort Sill, Okla. (Mfg. Pl.)	11-24
12-19	Post-office, Lexington, Mo.	11-17
12-22	Stores, Boston, Mass.	11-24
12-23*	Heating, etc., Oklahoma City, Okla.	11-24
12-27	Post-office, Missoula, Mont.	11-24
1-31	**Court-house, Onida, S. Dak.**	10-20
4-15	**Plans, Havana, Cuba**	10-20

Water-Works.

11-25	**Pumps, Minneapolis, Minn.**	11-17
11-25	Water-works, Jacksonville, Ore.	11-24
11-26	Wells, etc., Coshocton, Ohio	11-17
11-27	**Water-meters, Rugby, N. Dak.**	11-10
11-28*	Water-works, South River, N. J.	10-27
11-28	Water-main, Fargo, N. Dak.	11-24
11-30*	**Diversion channel, Portland, Ore.**	9-29
11-30	**Distributing canals, Powell, Wyo**	11- 3
11-30	Water mains, New York	11-24
11-30	Wells, New York	11-24
12- 1*	**Head gates, Boise, Idaho**	10-20
12- 2*	Engine, Atlantic City, N. J.	11-24
12- 2	Water pipe, Troy, N. Y.	11-24
12- 3	**Sublaterals, North Yakima, Wash.**	11-17
12- 5	Equipment, Niagara Falls, N. Y.	11-24
12- 5	Well, Kenyon, Minn.	11-24
12- 5	Water pipe, etc., Los Angeles, Cal.	11-24
12- 6	Water-works, Windsor, Mo.	11-24
12- 6	**Tank and tower, Pima, Ariz.**	11-10
12- 7	Water-works, Timmonsville, S. C.	11-17
12-12*	Dam and reservoir, Pittsfield, Mass.	11-17
12-13*	Pumps, Seattle, Wash.	11-17
12-13	Water-wks. apparatus, New York	11-24
12-15*	**Diversion work, Klamath Falls, Ore.**	10-20
12-15*	W.-Wks, Fayetteville, N. C.	11-24
12-20	Water main, Cleveland, Ohio	11-24
12-20	Water-works, Cimarron, N. Mex.	11-24

Sewers.

11-28*	Sewers, South River, N. J.	10-27
11-28	Sewer, Piqua, Ohio	11-17
11-28	Sewer, Fostoria, Ohio	11-24
12- 1	Sewers, Akron, Ohio	11-24
12- 1	Sewer, Newark, N. J.	11-24
12- 1	Sewer, Galion, Ohio	11-17
12- 3	Sewer, Decatur, Ind.	11-24
12- 7	Sewers, Brooklyn, N. Y.	11-24
12- 7	Sewer, Timmonsville, S. C.	11-17
12-19	Sewers, Huntington, W. Va.	11-24
12-23	Sewer, Olympia, Wash.	11-24
1- 6	Sewer, Buffalo, Wyo.	11-24

Streets and Roads.

11-25	**Road, Cincinnati, Ohio**	11-10
11-25	Sidewalks, etc., Roanoke, Va.	11-17
11-25	Sidewalk, Newark, N. J.	11-24
11-26	**Grading, Cleveland, Ohio**	11-17
11-30	Road, Terre Haute, Ind.	11-17
11-30	Regrading, etc., San Francisco	11-24
11-30	Road, Lisbon, Ohio	11-24
12- 2	Road, Cincinnati, Ohio	11-17
12- 5	**Highway, Jeffersonville, Ind.**	11-17
12- 5	**Gravel roal, Liberty, Ind.**	11-17
12- 5	**Road, Greencastle, Ind.**	11-17
12- 5	**Road, Williamsport, Ind**	11-17
12- 5	**Sidewalks, etc., Linden Heights, Ohio**	11-17
12- 5	Paving, Galveston, Tex.	11-24
12- 5	Gravel road, Pine Bluff	11-24
12- 5	Paving, Jefferson City, Mo.	11-24
12- 6	Gravel roads, Logansport, Ind.	11-24
12- 6	Gravel roads, Wabash, Ind.	11-24
12- 6	Gravel roads, Marion, Ind.	11-24
12- 6	Gravel roads, Peru, Ind.	11-24
12- 6	Roads, Rensselaer, Ind.	11-17
12- 7	Gravel roads, Kokomo, Ind.	11-24
12- 7	Roads, etc., Fort St. Philip, La.	11-24
12- 7	Grading, etc., New York	11-24
12- 8	Resurfacing, New York	11-24
12- 9	Gravel road, Lafayette, Ind.	11-24
12-13	**Paving, Crookston, Minn.**	11- 3
12-20	Sidewalk, Cleveland, Ohio	11-24
12-22	Road, Logansport, Ind.	11-24
12-22*	Paving, Wilmington, N. C.	11-24

Miscellaneous.

11-25	**Hose, Duluth, Minn.**	11-10
11-25	Boiler, car wheels, Panama (U. S. Poss)	11-17
11-25	Level work, Yuma, Ariz.	11-17
11-25	Trolley system, Frankford, Pa.	11-24
11-25	Piles, Everett, Mass.	11-24
11-26	Lumber, Jeffersonville, Ind.	11-24
11-28	Street signs, Louisville, Ky.	11-24
11-28	Mooring chain, New York	11-24
11-28	Towboats, Boston, Mass.	11-24
11-29	Steel tubing, etc., Washington, D. C.	11-24
11-29	Gymnasium apparatus, New York	11-17
11-29	Engines, New York	11-17
11-29	Market house repairs, New York	11-17
11-30	Dredging, Fort H. G. Wright, N. Y.	11-17
11-30	Asphalt trucks, rollers, N. Y.	11-24
11-30	Lockers, New York	11-24
11-30	Subdrainage tunnel, New York	11-24
11-30	Cannon, Washington, D. C.	11-24
11-30	Public baths, Winnipeg, Man.	11-24
12- 1	**Ditches, Pine Bluff, Ark.**	11-17
12- 1	**Door operating system, New York**	10-20
12- 1	**Port works, Turkey (Foreign)**	10- 6
12- 1	**Battleship, Colliers, Washington, D. C.**	10- 6
12- 1	**Extending breakwater, Los Angeles, Cal.**	11- 3
12- 1*	Lumber, Washington Barracks, D. C.	11- 3
12- 1*	Dredging, Wilmington, Del.	11- 3
12- 1	Railway, Carriages, China (Foreign)	11-10
12- 1	Armor, Washington, D. C.	11-10
12- 1	Engines, Watertown, Mass.	11-24
12- 1	Breakwater, Los Angeles, Cal.	11-24
12- 2	Moving paving stone, New York	11-24
12- 2	Repairs to ferryboat, New York	11-24
12- 2*	**Wharf, Richmond, Va.**	11-10
12- 2	Flagstaff, Fort Sam Houston, Tex.	11-17
12- 3	**Dredging, Newport, R. I.**	11- 3
12- 3	**Coal and ash handling apparatus, Norfolk, Va.**	10-27
12- 5	Dredging, Wilmington, Del.	11-10
12- 5	Vacuum cleaning system, Columbus, Ohio	11-17
12- 5	**Levee, Lancaster, Ohio**	11-17
12-5	Landing pier, Stratford, Que.	11-17
12- 5	Fire apparatus, New York	11-24
12- 5	Subway, Savannah, Ga.	11-24
12- 5	Locomotive, etc., Fort Leavenworth, Kan.	11-24
12- 5	Breakwater, Chapel Cove, N. S.	11-24
12- 5	Seawall, New York	11-24
12- 5	Gravel, sand, etc., New York	11-24
12- 5	Street flushing machine, Vallejo, Cal.	11-24
12- 6	Retaining wall, New York	11-24
12- 6	Fire apparatus, Los Angeles, Cal.	11-24
12- 6	Ditch, Carroll, Minn.	11-24
12- 6	Wharf, St. Joseph de Letellier, Que	11-17
12- 6	Drains, Sac City, Iowa	11-10
12-6	Paving blocks, New York	11-24
12- 7	Oil storage system, Rock Island, Ill	11-17
12- 7	Dredging, New York	11-24
12- 8	Ditch, Marshall, Minn.	11-17
12-8	Coping, fence, New York	11-24
12- 9	Drainage canal, Howard, Miss.	11-17
12- 9*	Removing rock ledge, Cincinnati, Ohio.	11-10
12- 9	Lumber, Seattle, Wash.	11-24
12-10	**Pier, Bremerton, Wash.**	11-10
12-10	Quay wall, Key West, Fla.	11-10
12-10*	Dredging, Wilmington, Del.	11-17
12-12	Dredging rock removal, New York.	11-10
12-13	**(1911) Copper mine, Turkey (Foreign)**	10- 6
12-15	Dry-dock, etc., Argentina (Foreign).	11-10
12-17*	Dredging, Providence, R. I.	11-17
1 -17	Metal superstructures for bridges, Uruguay, (Foreign)	11-17
12-19*	Dredging, New York	11-24
12-19*	Leaves for Weirs, Wheeling, W. Va.	11-24
12-21*	Dredging, New Haven, Conn.	11-24
12-21*	Sand and gravel, Montgomery, Ala.	11-24
12-22	Quay wall, Key West, Fla.	11-24
12-22	Lock gates, etc., Wheeling, W. Va.	11-24
12-22*	Pier work, Detroit, Mich.	11-24
12-22	**Steel caissons, New York**	11-10
12-22	Quay wall, Key West, Fla.	11-24
12-23	Fabricated steel, rivets, Los Angeles, Cal.	11-24
12-27	Furnaces, etc (garbage) N. Y.	11-24
1- 7	**Dredging, Hawaii (U. S. Poss).**	10-27
1- 9	Tramway plant and equipment, England (Foreign)	11-17

Examinations.

Applications filed.		Noted in issue of
11-26	**Telephone traffic inspector, Albany, N. Y.**	10-20
11-26	**Special investigator, Albany, N.Y.**	10-20
11-26	**Mechanical engr., Albany, N.Y.**	10-20
11-26	**Junior statistician, Albany, N. Y.**	10-20
11-26	**Highway inspector, Albany, N.Y.**	10-20
11-26	**Chief investigator, Albany, N. Y.**	10-20
11-26	**Assistant gas inspector, Albany, N. Y.**	10-20
11-26	**Assistant chief, Albany, N. Y.**	10-20
12- 7	**Preparator of Fossils, Washington, D. C.**	11- 3
12- 7	**Scientific Assistant in Soil Bacteriology, and Scientific assistant in Tobacco Chemistry, Wash., D. C.**	11-10
12- 7	**Mineral Examiner, Wash, D. C.**	11-10
12- 7	**Cartographic Draftsman, Wash., D. C.**	11-10
12- 7	**Fortification Draftsman, Wash., D. C.**	11-10
12-7, 8 and 9	**Inspector of Mech. & Elec. Engineering, Washington, D. C.**	11-10
12- 7	**Superintendent of Construction, Washington, D. C.**	11-17
12- 8	**Gas Meter Tester, Albany, N. Y.**	11-17
12- 8	**Assistant Electrical Engineer, Albany, N. Y.**	11-17
12- 8	**Chemist, Albany, N. Y.**	11-17
12-17	**Assistant in Dairy Bacteriology, and Assistant in Dairy Chemistry, Washington, D. C.**	11-17
12-28	**Industrial teacher, Washington, D. C.**	11-10
1- 4	**Chemist in Forest Products, Washington, D. C.**	11- 3
1- 4	**Mechanical Draftsman, Washington, D. C.**	11-17
1- 4	**Metallurgical Chemist and Assayer, Washington, D. C.**	11-17
1- 4	**Physical Laboratory Helper, Washington, D. C.**	11-17
1- 4	**Mechanical and Chart Draftsman, Washington, D. C.**	11-17

tion pyrometer, the telescope had to be placed not over 30 ins. from the furnace opening or heated body when the latter was 3 ins. in diameter or in general so that the tube should not be distant from the observed body more than ten times the observed bright diameter. In the Brown design, the finder also serves to measure the distance. The bright image is to fill the finder exactly.

The pyrometer tube is collapsible like an ordinary telescope. Indicator, tripod and wires can be packed with the pyrometer in a small leather case, the outfit weighing 15 lbs. The instrument has been arranged particularly for measuring blast-furnace, open-hearth, brick-kiln, cement-kiln, boiler-furnace temperatures, etc., and an accuracy of 1% within 30° at 3,000°.

THE FLEAS of Panama are the subject of such veneration to a correspondent in "The New Orleans Picayune" that he drops into poetry on the subject.

By the clock on the table in front of me it is a quarter to 2 o'clock, and from the fact that it is quite dark outdoors I judge that it is morning. Other evidence as to the time of day is that the clock in the cathedral across the way has just struck eight times—six high notes in three pairs—indicating the three-quarters, and two deep booms on the bass bell, telling the hour. My watch also declares that it is 1.45 o'clock. When two out of three of his compasses agree a mariner accepts without question; surely I am not too confiding in allowing three distinct voices to convince me.

Granting, then, that it is nearly 2 o'clock in the morning, you will say it is time to be in bed, and you are right. I usually am in bed at this time of the day. The fact is, I went to bed four hours ago, and have only just arisen, lighted my lamp and seated myself to write what I know about fleas. My acquaintance with literature is not broad, and, therefore, it signifies little when I say that, so far as I know, the flea has been entirely slighted by authors who write in the English language. If my memory serves me right, Burns has said something about the louse, Wordsworth makes some reference to the leech, and a bard whose name I do not recall thus apostrophized the mosquito:

Oh, thou who'st neither beast nor bird,
Receive this tribute from my heart:
Thou'rt small, but, oh, anopheles,
A nuisance thou art.

Far be it from me to moralize, and yet I cannot help but admire the industry and honest effort of those to whom humble stations have been assigned by the lottery of fate. In this class is the flea. Circumstances had never thrown us together until my arrival in Panama a little less than three years ago. I met him the first night. Through some mistake he and I got into the same bed, but as soon as I felt my error I arose from sleep, and, with incandescent lamp in my hand and reading spectacles on my nose, began to search. Need I say that such searches are not unusual for a bachelor who has slept in several kinds of beds in the past few years? Prior to that time, however, I had expected and found one or more creatures that resembled flaxseed and were quite easily distinguishable on the white sheet. Now I was at a loss.

In the early days of my acquaintance with fleas I would place a finger on one and try to crush him against the sheet. Futile efforts. Gradually I evolved the plan of wetting the finger before touching the flea. A wet flea cannot jump, and while he is thus hampered it is easy to get him onto a hard surface where one can crush him. I trust I am not too proud of this discovery; I realize that at best it is a small thing, and yet if the little things that men have contributed to the sum of human knowledge were subtracted from it the difference would be a negative quantity, or at most a simple zero.

About the only other knowledge I have on fleas is a recipe to catch them in case a room becomes so infested as to make impracticable the sportsmanlike method of pitting the perseverance and skill of the individual hunter against the dodging and hiding abilities of the individual flea. Place a candle in the center of a basin of soapy water, light the candle and set the basin in the center of the room. Extinguish all lights excepting that of the candle. The flea, being attracted by the light, will hop into the water.

And now it is time to go to bed. From somewhere back of the horizon the sun has poured some daylight into the dark, and it is gray outdoors and the cathedral clock has chimed a half-hour after 4, and the rooster that spends his nights in the window of the old church out back of my house is telling that old, old story of his, and you are tired, and so am I. So "Good night," or, better, "Good morning." I'm going to bed, and yet—and yet—

TRADE PUBLICATIONS.

WATERPROOFING RESERVOIRS. The American Asphaltum & Rubber Co., 600 Harvester Building, Chicago, Ill. Paper; 9¼ × 13 ins.; pp. 4; illustrated.

This describes the methods employed in waterproofing reservoirs at Pensacola, Fla., and Monterrey, Mexico. It includes a report of the engineer for the former work.

PORTLAND CEMENT. Universal Portland Cement Co., Chicago. Paper; 6 × 9 ins.; pp. 20; illustrated.

This bulletin (No. 78) contains, among other matter, a paper on the handling of concrete during cold weather. The purpose is to show that at slight extra expense concrete construction may be carried on safely during the most severe winter weather.

HIGH-PRESSURE WELL AND DRAINAGE PUMP. Nye Steam Pump & Machinery Co., 565 Washington St., Chicago. Paper; 3½ × 6¼ ins.; pp. 8; illustrated.

The pump described is intended particularly for use in foundation, sewer, cofferdam, caisson and other construction work. One of the illustrations shows a portable pumping rig draining a trench by means of well points, the pipes from which are connected to the pump suction.

STEEL FORMS FOR CONCRETE BUILDINGS. Reichert Mfg. Co., Second Ward Bank Building, Milwaukee, Wis. Paper; 6 × 9 ins.; pp. 16; illustrated.

These forms are unit panels, locked together and connected by transverse wires and stay rods. Their use is said to effect a considerable saving in time, cost and labor, as compared with wooden forms. The illustrations show the forms as used on buildings of plain and reinforced concrete.

CRUSHING AND GRINDING MILL.—Johnson Engineering Works, First National Bank Building, Chicago. Paper; 10 × 4¼ ins.; pp. 8; illustrated.

The "Marathon" mill is a horizontal revolving cylinder (slightly inclined downward to the discharge end) which contains a number of loose steel bars of the same length as the cylinder. The material is crushed and pulverized by these bars, and a corrugated lining prevents the bars from simply sliding against the side of the cylinder.

PUMPING FOR IRRIGATION. The American Well Works, Aurora, Ill. Paper; 7¾ × 10½ ins.; pp. 32; illustrated.

This pamphlet deals generally with irrigation by means of water pumped from wells, and with the different types of pumps for this class of work. These include horizontal-shaft centrifugal pumps driven by belting, and vertical-shaft centrifugal, driven either by a belt pulley or an electric motor on top of the shaft. There are descriptions, also, of irrigation pumping plants in Kansas, California and Mexico.

For other Proposal Advertisements see pages 51, 52, 53, 54, 56 of Advertisements and Construction News page 256.

CANAL.

STATE OF NEW YORK.
OFFICE OF SUPERINTENDENT OF PUBLIC WORKS, ALBANY.
November 23, 1910.
NOTICE TO CONTRACTORS.

Sealed proposals will be received by the undersigned at his office in the Capitol in Albany, N. Y., for improving the Erie and Oswego canals, pursuant to the provisions of Chapter 147 of the Laws of 1903, and of the amendments thereto, and for improving the Cayuga and Seneca canals, pursuant to the provisions of Chapter 391 of the Laws of 1909, and of Chapter 147 of the Laws of 1903 and of the amendments thereto, as follows:

On Contract No. 48, Erie Canal, Section 8; Contract No. 51, Erie Canal, Section 5; Contract No. 76, Erie Canal, Section 8; Contract No. 77, Erie Canal, Section 8; and on Contract No. 80, Oswego Canal, Section 1, until twelve o'clock noon of Tuesday, December 20th, 1910, at which place and hour they will be publicly opened and read; and

On Contract No. 91, Erie Canal, Section 1; Contract A, Cayuga and Seneca Canal, Section 1; and Contract B, Cayuga and Seneca Canal, Section 1, until twelve o'clock noon of Wednesday, December 21st, 1910, at which place and hour they will be publicly opened and read:

The work referred to above is described as follows:

Contract No. 48.
Erie Canal—Section 8.

For the construction of the canal from a point near the N. Y. C. Railroad crossing at Lyons to a point near the West Shore R. R. crossing at East Newark. Length, 5.75 miles. Sheets 1 to 81, inclusive.

Contract No. 51.
Erie Canal—Section 5.

For constructing a canal feeder between Trenton Falls and Nine Mile Creek, together with a gate-house, culverts and all other work appertaining to the contract. Length, 5.75 miles. Sheets 1 to 32, inclusive.

Contract No. 76.
Erie Canal—Section 8.

For the construction of the canal from a point near the West Shore Railroad crossing at East Newark to a point about one-half mile east of Port Gibson. Length, 5.77 miles. Sheets 1 to 49, inclusive.

Contract No. 77.
Erie Canal—Section 8.

For constructing the canal from a point about one-half mile east of Port Gibson to about one-half mile west of Palmyra. Length, 6.78 miles. Sheets 1 to 76, inclusive.

Contract No. 80.
Oswego Canal—Section 1.

For the construction of a dam and bulkheads across the Oswego River at Phoenix, N. Y. Sheets 1 to 14, inclusive.

Contract No. 91.
Erie Canal—Section 1.

For building and equipping hydro-electric power plant on the Erie canal near the East end of Crescent Dam. Sheets 1 to 23, inclusive.

Contract A.
Cayuga and Seneca Canal—Section 1.

For constructing Lock No. 1 and Dam No. 1 near Cayuga. Length, 0.25 mile. Sheets 1 to 33, inclusive.

Contract B.
Cayuga and Seneca Canal—Section 1.

For excavating a channel mainly in the Seneca River, from Montezuma to deep water in Cayuga Lake, from Cayuga Lake to Seneca Falls and from Waterloo to deep water in Seneca Lake. Length, 17.2 miles. Sheets 1 to 43, inclusive.

Plans may be seen and detailed specifications, engineer's estimate of quantities, proposal blanks, form of contract and bonds required and other information for proposers may be had at the office of the Superintendent of Public Works at Albany, N. Y., at the office of the Assistant Superintendent of Public Works for the Middle Division at Syracuse, N. Y.; at the office of the Assistant Superintendent of Public Works for the Western Division at Rochester, N. Y.; and at the canal office, Spaulding's Exchange, Buffalo, N. Y.

Copies of detailed maps or drawings may be obtained from the State Engineer and Surveyor at Albany, N. Y., upon payment to him of the cost of producing them.

Monthly estimates will be paid of ninety per centum (90 per cent.) of the work done at the contract price. Every proposal for said work must be accompanied by a money deposit in the form of a draft or certified check upon some good banking institution in the city of Albany or New York, issued by a national or State bank in good credit within the State and payable at sight to the Superintendent of Public Works for five per centum (5 per cent.) of the amount of the proposal.

The person whose proposal shall be accepted will be required to execute a contract and furnish bonds within ten days from the date of notice of award delivered to him or them in person or mailed to the address given in the proposal.

Upon execution of the contract and approval of bonds, the certified check or draft will be returned to the proposer unless the same shall have been presented for collection prior to such time, in which case the amount of the deposit will be refunded by the Superintendent of Public Works.

The deposits of bidders other than the one to whom the award of contract shall be made will be returned immediately after the award has been made.

The amount of bond required for faithful performance will be ten per centum (10 per cent.) of the amount of the estimated cost of the work according to the contract price, and an additional bond, known as the labor bond, in the sum of ten per centum (10 per cent.) of the amount of the estimated cost of the work according to the contract price, will be required as security that the contractor will pay in full at least once in each month all laborers employed by him upon the work specified to be done in the contract.

Each proposal must be addressed to the Superintendent of Public Works, Albany, N. Y., and must be endorsed on the envelope with the name of the construction for which the proposal is made.

Award, if made, will be made to the person or persons whose proposal shall be lowest in cost to the State for doing the work, and which shall comply with all provisions required to render it formal. Before any award shall be made the lowest bidder will be required to satisfy the Superintendent of Public Works of his ability to provide suitable equipment and materials for the proper performance of the work.

The right is reserved to reject all proposals and readvertise and award the contract in the regular manner if, in the judgment of the undersigned, the interests of the State will be enhanced thereby.

F. C. STEVENS,
Superintendent of Public Works.

U. S. ENGINEER OFFICE, Montgomery, Ala., Nov. 21, 1910.—Sealed proposals for sand and gravel will be received at this office until 2 o'clock p. m., Dec. 21, 1910, and then publicly opened. Information on application. J. B. CAVANAUGH, Major, Engrs.

WATER-WORKS APPARATUS.

CONTRACT 43.
New York, N. Y.

Sealed bids will be received by the Board of Water Supply, at its offices, seventh floor, 165 Broadway, New York, until 11 A. M. on December 13, 1910, for Contract 43, for furnishing and delivering certain apparatus and materials, and furnishing, delivering and installing certain other apparatus and materials, at Shokan, Kensico and Hill View reservoirs and in various structures along Catskill aqueduct in Ulster, Orange, Putnam and Westchester counties, New York. The apparatus and materials consist of 23 6-inch to 72-inch gate-valves, 24 6-inch and 12-inch sluice-gates, 10 6-inch check-valves, 2 16-inch stop-valves, 7 hydraulic cylinders for gate-valves, 2 motor driven operating mechanisms, 9 hand operating mechanisms and miscellaneous appurtenances.

At the above place and time the bids will be publicly opened and read. Pamphlets containing information for bidders, and pamphlets of contract drawings can be obtained at the above address by depositing the sum of ten dollars ($10) for each pamphlet. For further particulars see Information for Bidders.

JOHN A. BENSEL, President;
CHARLES N. CHADWICK,
CHARLES A. SHAW,
Commissioners of the Board of Water Supply.
THOMAS H. KEOGH, Secretary.

WATER-WORKS.

POWER STATION AND FILTER INSTALLATION.
Fayetteville, N. C.

Sealed proposals will be received for the materials and labor in connection with the above work by the Public Works Commission, Fayetteville, N. C., until 12 o'clock noon, December 15th, 1910, when they will be opened and publicly read.

The improvements contemplated consist of furnishing and installing two filter units of one-half million gallons per day each, together with all piping, machinery and appurtenances connected therewith, the construction of a plain and reinforced concrete sedimentation basin, filtered water well, etc., and the construction complete of a brick filter and power building.

Plans and specifications are on file at the office of the Public Works Commission, H. J. McBule, Secy., and will be delivered to bidders for five dollars ($5).

Each proposal must be accompanied by a certified check in the sum of five (5) per cent. of the amount of the bid.

The Commission reserves the right to reject any and all bids.

PUBLIC WORKS COMMISSION.
N. B. ALEXANDER, Chairman,
Fayetteville, N. C.
JNO. K. STRANGE,
Engineer in Charge,
Fayetteville, N. C.

TREASURY DEPARTMENT, Office of the Supervising Architect, Washington, D. C., November 14, 1910.—Sealed proposals will be received at this office until 3 o'clock P. M. on the 23rd day of December, 1910, and then opened, for the installation of a heating and ventilating apparatus in the U. S. Post Office, Oklahoma City, Okla., in accordance with the drawings and specification, copies of which may be had at this office or at the office of the Custodian of site, Oklahoma City, Okla., at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect.

U. S. ENGINEER OFFICE, New London, Conn., Nov. 21, 1910.—Sealed proposals for dredging in New Haven Harbor, Conn., will be received at this office until 3 p. m., Dec. 21, 1910, and then publicly opened. Information on application. HARRY TAYLOR, Lt.-Col., Engrs.

Situations Wanted

ENGINEER wishes to hear from machinery and steel reinforcement concerns desiring representation in Denver, Colo. Address "A. A. 21," Engineering News, New York. 21-1t

Miscellaneous Wants

ARCHITECTURAL ENGINEERS solicit commissions for the economic design and shop detailing of structural and ornamental iron. Suite 44, Bowery Bank Bldg., New York. 13-12t

WANTED
CONTRACTOR
to take contract to fill 3600' trestle; amount of fill 13,019 cu. yds. Contractor must furnish all tools, cars, locomotives, and equipment. Waccamaw Lumber Co., Bolton, N. C.